NATION'S BUSINESS

APRIL · 1942





A UNITED NATION

• The nation is united — and Long Distance telephone lines help to tie it together for war's work. . . . You can keep materials moving, wheels turning, men working — if you can reach any one, anywhere in the land, in a hurry. . . . It takes a *lot* of telephone calls to build fighting planes, freighters or factories — to move men and machines around the map. . . . If the rush of war interferes here and there with the accustomed smoothness of regular Long Distance traffic, we hope you will understand.

SERVICE TO THE NATION **IN PEACE AND IN WAR**



How to uncover a billion-dollar treasure

A typical example of B. F. Goodrich leadership in truck tires

FIVE years men worked whittling down mountains, excavating 100 million tons of earth and rock. And now.— just in time to supply Uncle Sam's growing war needs — the treasure's been uncovered. A billion-dollar deposit of copper ore stands ready to be mined!

On this vast project at Morenci, Arizona, rubber tires designed by B. F. Goodrich stood up under almost unbelievable punishment. Giant dump trucks carried off 37 tons of mountain at a crack. Including truck weight, the big B. F. Goodrich Earth Mover Silvertowns on many of the vehicles had to keep *55 tons* rolling. And over jagged rocks, up steep grades, 'round hairpin curves.

If you're in the construction business, you know of the leading role of B. F. Goodrich research in the development of such "tough job" tires for all the types of earth-moving equipment on which modern construction techniques depend. And if you own commercial trucks it will pay you to know about the recent B. F. Goodrich developments in ordinary truck tires.

In the new Speedliner Silvertown, for example, B. F. Goodrich engineers introduced basic improvements that can *save you money*. There's an internal Load-Shield construction that gives amazing new protection against road and load shocks. There's a thicker, heavier, deeper-cut, flatter tread that gives thousands of extra miles of service. And tread and body are fortified with Duramin, the amazing B. F. Goodrich chemical discovery that keeps rubber young and tough, s-t-r-e-t-c-h-e-s tire life.

Remember, whatever tires you are permitted to purchase under the government rationing plan may have to last you a long, long time. And B. F. Goodrich Speedliners will do just that! They conserve rubber because they give more miles per pound of tire. For whatever tires you are permitted to buy, see the B. F. Goodrich man *first* —for B. F. Goodrich is *first* in rubber.



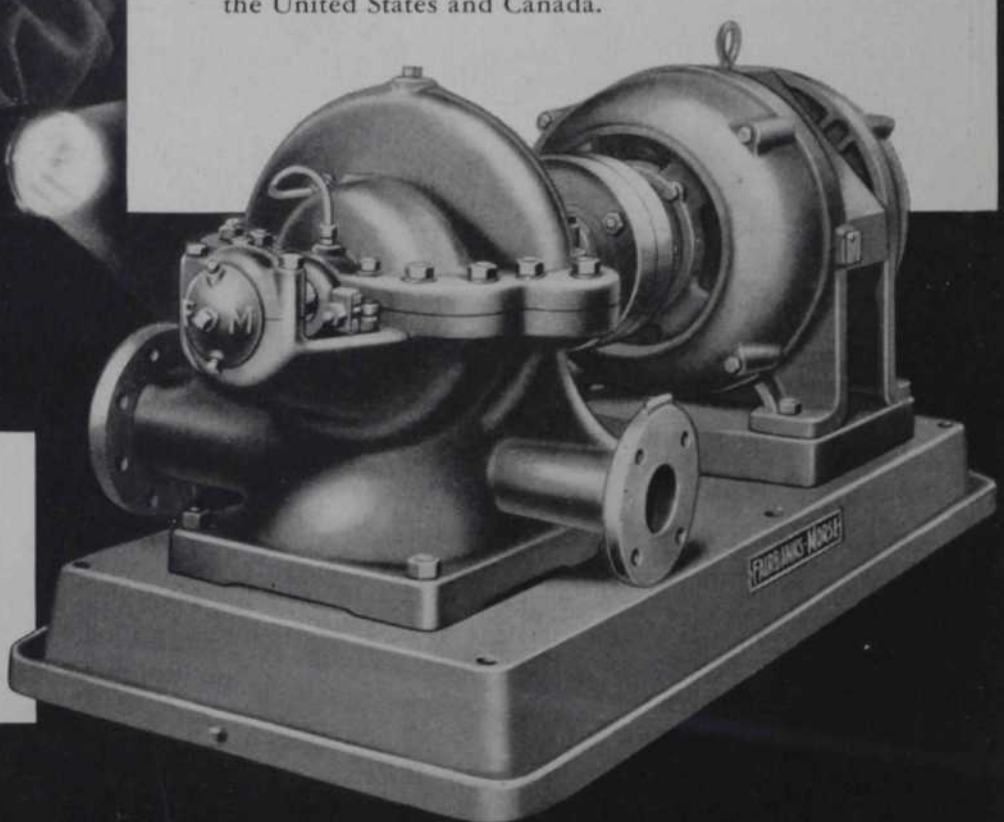
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Guards Are Futile Against THIS Sabotage!

RIGHT under your guards' noses, unsuspected saboteurs may be steadily draining off vitally needed power... handicapping production as much as would destroying one generator out of every four or five!

These unsuspected saboteurs *are* at work in your plant if your pumps are not of the latest, improved designs. For ten-year-old pumps of certain types, even if as good as new, require 25% more power than today's Fairbanks-Morse models. And 4- or 5-year-old pumps of other types consume so much more power than current models that continued use is more costly than replacement.

Find out *now* if *your* pumps are the types which curtail production and steal power and profits. Let a Fairbanks-Morse Pump Engineer make an inspection, with no cost or obligation to you. Write Fairbanks, Morse & Co., Dept. D56, 600 S. Michigan Ave., Chicago. Branches and service stations throughout the United States and Canada.



FAIRBANKS-MORSE CENTRIFUGAL PUMPS

A complete "family" of single-stage, split-case pumps for low, moderate, medium, and high heads, is described in Bulletin 5810D. Many other bulletins available on other types.

FAIRBANKS·MORSE PUMPS

DIESEL ENGINES ELECTRICAL MACHINERY MAGNETOS RAILROAD EQUIPMENT WASHERS-IRONERS STOKERS
PUMPS MOTORS FAIRBANKS SCALES WATER SYSTEMS FARM EQUIPMENT AIR CONDITIONERS

THE SECRET
they carry in their shoes



ALONG THE AVENUE, down village streets and up country lanes . . . America walks.

Some on $30 shoes; others on $3 shoes—yet regardless, *each* stride reveals a comfort that is the envy of the world! And what is the secret of this comfort?

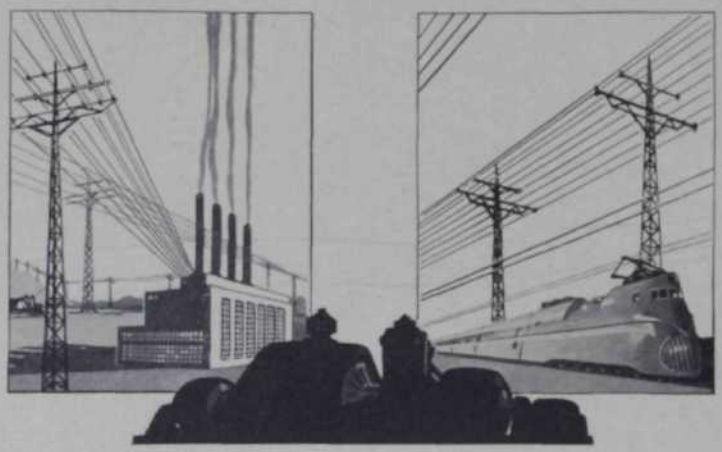
Salt. Yes, salt. This familiar substance has been used for centuries to tan leathers.

But today Sterling Rock Salt is the root of a vast improvement over hoary tanning practices . . . an American improvement that bears the strange name of the Lixate Process.

For the Lixator—pouring *pure*, fully saturated brine of known densities—now gives the leather chemist perfect control over the curing process . . . as contrasted with the old fashioned rule-of-thumb "dry" salt process by which tanners had to work! Moreover, this exclusive International Salt Company development cuts production costs—uses less salt . . . utilizes economical Sterling Rock Salt.

Yet tanning is only one field in which the Lixator helps progressive industries to produce profits. Leaders in glass-making and dyeing . . . in the meat-packing and canning industries . . . rely on salt or salt processes by International. And salt serves in scores of other industries. Salt is also of paramount importance to stock feeding and for snow and ice removal.

Would you like to test your knowledge of common salt? Just let us know where we can send you the important facts contained in the booklet, "*Salt by International.*" International Salt Co., Inc., Scranton, Pa. Rock salt, evaporated salt, lixate brine, Sterling table salt—for industry, agriculture, the home.



YOU CAN'T CHANGE YOUR INSURANCE *during the fire!*

Legend says that Chinese doctors are paid to keep people from getting sick. But if this fails and a man falls ill, medicine finds many ways to help get him well.

With business insurance, no such situation could exist. Nothing but prevention—and successful prevention—can possibly be effective. If your insurance contract is loosely drawn—and you have a loss not covered by that contract—nobody can help you. You can hardly ask the insurance company to broaden the coverage of your policy *during the fire* or *after the loss.*

Failure to understand this simple principle has cost business men many millions of dollars!

The sound business precaution is to have someone of your own choosing—competent and unbiased—to represent you in negotiating your insurance contracts, in collecting your claims, and in handling all the details of your insurance program throughout the year.

This is the function of the insurance broker. He is essentially a buyer—not a salesman. He is not committed to any particular insurance company. At all times he represents *you* and looks out for *your* interests. He charges you no fee for his services; the seller—the insurance company—pays the brokerage.

Johnson & Higgins have had nearly a century of experience as insurance brokers. They act as insurance counsel and buyers for substantial firms and corporations. Their service offers you many practical advantages. Your request to have a representative explain this service, at your own office, will receive prompt action.

* * *

The best brokerage service is yours to command—at no additional cost.

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NATION'S
BUSINESS

Chamber of Commerce of the United States

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Elaborate federal machinery for accord has merely produced more discord. Multiplication of controversies over union status demands that the Government define its attitude on closed shop and other issues

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VOLUME 30 NUMBER 4





Eagle Eyes for the Groundlings of War

Within the smoky, reeking gloom of a hurtling tank, the commander must see through the eyes of flyers far above him. And at modern flying speeds, pilots, observers, bombardiers must be protected from the air stream. Plexiglas, said to be "the most useful plastic in aviation," provides tough, shatter-proof colorless transparency for cockpit enclosures, observation hatches, gun turrets and bomber noses. And in its manufacture, Plexiglas is protected by York air conditioning, a specially engineered installation that frees the air of dust that might otherwise settle on the warm plastic, that maintains the exacting temperature and humidity levels necessary to perfect hardening. Here, as in a hundred other industries, air conditioning is stepping up the production of what-it-takes to stop the enemies of freedom. York Ice Machinery Corporation, York, Pennsylvania.

"KEEP'EM FLYING!"

YORK REFRIGERATION AND AIR CONDITIONING

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

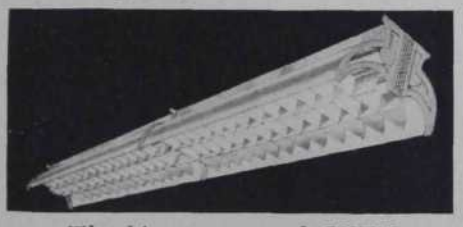
Guth
Fluorescent
LIGHTING
VITAL
Equipment
FOR
THE ARMY THAT
WORKS INDOORS!



In factories, in drafting rooms, in warehouses, in offices—this is a war of nerves. Long, extra hours of eye-strain can greatly hinder America's productive efficiency—commit unintentional but damaging sabotage through errors, spoilage and waste.

You can do more work—better work—and enjoy all the other tremendous benefits of clear, effortless seeing with the help of GUTH Fluorescent Lighting. Users are proving this statement daily, attesting to better morale and greater working comfort—with efficiency up 15% and more in many cases.

Write us today for sound engineering advice on modern lighting—without obligation, of course.



The biggest part of GUTH ★ Lighting Equipment is now produced for wartime purposes. ★

40th Anniversary of Guth Lighting Leadership

The EDWIN F. GUTH CO. • 2615 Washington Ave., St. Louis, Mo.

THROUGH THE *Editor's Specs*

The reason why

WE ASKED a business man who had been called to Washington why he and others like him invariably got licked in their public encounters with labor leaders and with politicians. He thought a moment and then answered with a chuckle:

Little Willie asked his father why mother always won the arguments in the family. The father replied: "I can explain that, son. I am out all day earning the family living while mother sits around with nothing to do but think of arguments."

Earning a living

THE same day another industrialist, called to Washington by a bureau, showed me his little vest pocket date book. I jotted down some of his jobs *of the next ten days.* Here they are:

Negotiate an R.F.C. loan for new defense plant.

Negotiate with Army and Navy Defense Corporation for a plant to manufacture fuel pumps for airplanes.

Work out plan to increase employee training school from 450 to 900.

Work with engineers in redesigning a $9,000,000 defense plant, to eliminate use of copper and reduce amount of steel in structure.

Complete negotiations for emergency plant, involving purchase and reclaiming of floor space in old buildings.

Address 5,000 employees at dinner meetings scheduled during week of March 16.

Attend a board meeting.

Complete arrangement with bankers for sale of stock to increase capital.

Carry out assignment to organize industries in his section to supply 150 blood donor volunteers per day to mobile units.

Two hospital and welfare board meetings—and two dinners at home during the period, unless—

His plant had trebled its war production output in a little over a year. He had no inside labor troubles. He was summoned to Washington by a Board to answer a complaint from outside union leaders as to why, etc., etc., in order to get ready to begin to formulate a reply, and he had been all day trying to get a copy of the complaint. Selah.

Editorial code during war

LINCOLN was accused in Congress of undermining the Government by criticizing the Mexican War policy. He replied that he saw a distinction between "the Government" which is permanent and "an administration" which is temporary.

England, during the week of January 5, faced the Churchill Administration with 50 questions on the conduct of the war. Are we less "democratic" than England?

Criticism here brought about repeal of congressional pensions; it brought into the open the crazy, messy O.C.D. with promise of cleaning it up; it is reducing at this writing "Pullman car farming" in the A.A.A. and payment of poll taxes to a favored few by the federal Government.

Criticism, not carping, not for the purpose of embarrassing, but to question why. If we were to rest our case for criticism of a government administration in war time or peace time, it would be this:

Healthy criticism forces an explanation, and public officials facing such public explanations are likely thereby to give more careful consideration to their acts.

A report on the Normandie

COMING at such a critical time, the news of the Normandie fire exasperated the nation to the boiling point. Many people, in their anger, demanded punishment of the contractor, the captain and the workmen immediately responsible. "How could anybody be so stupid?" they asked.

An explanation of where the responsibility lies is given in this extract from a letter to NATION'S BUSINESS by Charles S. Forbes, New York insurance man:

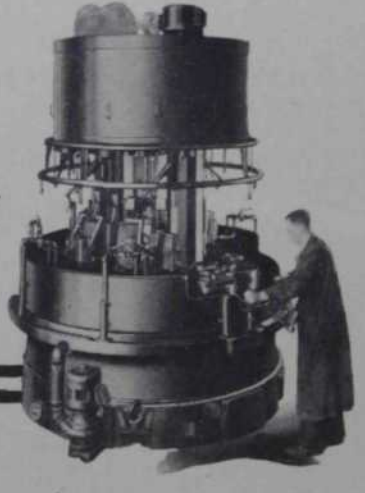
We lost the Normandie as the result of a social custom enforced by law, under the jurisdiction of the National Labor Relations Board. Think a moment—a gang of torch men with a competent foreman are ordered to cut out four stanchions. They do three of these stanchions in a highly competent and workmanlike manner. Near the fourth is a pile of inflammable life preservers put there by porters, laborers or longshoremen who are authorized to move stuff around. The foreman tried to find someone who could legally move the pile, as he saw it was in the way of his mechanics. Under all the rules, he and his men had no right to move anything. That was considered the legal right to a job enjoyed by someone



• You'll find no "Mult-Au-Matics for sale" in the used machinery columns, despite the fact that there are thousands throughout the country—some veterans of over 20 years of service.

The reason? Because of sound design and honest, careful manufacture, even old Mult-Au-Matics are able to machine parts to the close tolerances and at the high rates of speed demanded by latest practice.

Wherever plants are at work, Mult-Au-Matics will be found among the fastest, most reliable and lowest cost producing equipment.



THE BULLARD COMPANY
BRIDGEPORT, CONNECTICUT

BULLARD

else. On the other hand, this was rush work, his country was at war and grievously needed this ship.

What would any conscientious workingman do under our system? If he moved the pile he might start a strike. If he waited for someone else to move it, or sought a jurisdictional decision as to who should do the job the other stanchion cutting would have to wait. As it turned out, either of these courses would have saved the ship. But he took the third course and it happened to be the wrong one. He did not remove the inflammable life preservers, which would have violated the labor code. He went ahead with his job and set the ship on fire. We shouldn't blame him, but the jurisdictional nonsense.

Ungrateful colonials

AGAIN, our old friend, Professor Rex Tugwell, looms large in the news. First, he made America over, then he sold molasses, now he is busy bearing the white man's burden as governor of Puerto Rico. The colonials don't like the democracy with which they are being dosed by their savior.

Bolivar Pagan, resident commissioner and delegate to Congress from Puerto Rico, says the professor thought "that the island of Puerto Rico was a very nice place to test new social experiments with money that he promised would come from the federal Treasury." As a starter, he proposed to divide up the land among the proletariat. That was unpalatable socialism even if it had been done fairly, but Pagan asserts that Tugwell's own political favorites are getting all the best land.

At home, Tugwell's big idea was to make America over by resettling people in his Greenbelts, Hightstowns and Happy Valleys. He didn't do so well with that idea. The Government is now trying to turn loose of these community projects as fast as it can find buyers at ten cents on the dollar or less of its original investment. In going to Puerto Rico, perhaps he was applying the old proverb that a man is not without honor save in his own country.

Washington 'phone book

YOU can call Republic 1820 and do the darnedest things. There you can get:

Hon. Harold L. Ickes
Washington National Monument
Predator & Rodent Control, Division of,

And we know some more.

You can get the Supreme Court by calling Executive 1640. W.P.B. gets O.P.M.'s old number, Republic 50-50. No change. The republic still gets an even break.

Note on alcoholism

DR. MERRILL MOORE, Medical Director of Washingtonian Hospital,

Boston, reports that excessive alcoholism is based on "a tripod of boredom, excessive fatigue and a desire to escape." We welcome this implied assurance that alcoholism can never become a vice of the NATION'S BUSINESS staff. Excessive fatigue and a desire to escape are commonly in evidence in this office. But boredom? No—not so long as we have an Office of Civilian Defense with 99 coordinators, including a tug-of-war division, with a director of the "non-competitive outdoor activity" of walking, who, incidentally, serves on the committee handling the "non-competitive outdoor activity" of hiking. Bottoms up, pals—no danger of a hang-over in our shop!

Cheerful progress note

HATS off to the Massachusetts Public Utility Commission! The Mayor of Lynn requested a state-wide investigation of the New England Telephone & Telegraph Company, with the usual complaint that "rates were too high." The Commission summed up its position as follows:

> In our nation's present crisis, the company is commendably and capably serving in a capacity in the common endeavor. Moreover resources of the company are needed by the nation. It would not be in the public interest to intervene at this time.

Optimistic note

WUXTRY! WUXTRY! The free enterprise system is *not* doomed. Small business *will* survive.

These are our own conclusions based on the report that newsboys have sold defense stamps valued at $11,000,000 in the past five months. If the nation still has enough newsboys to sell enough stamps to total $11,000,000, then it still has enough enterprise, individual initiative and Horatio Alger ambition to keep American business flowing along for another 50 years, at least.

On second thought it may be best to keep the whole matter quiet. If it gets to the ears of the spinsters who worry about child labor—all is lost.

MacArthur still holds out

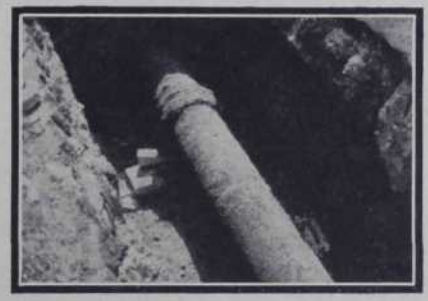
A RURAL survey by the Farm Security Administration reveals that 96 per cent of all men, women and children examined have significant physical defects. A significant physical defect is presumably a defect significant enough to necessitate the immediate hiring at Washington of a great many more health surveyors to conduct many more health surveys revealing more and more significant defects. —*New York Times*

Economy on the home front

A VERY unorthodox resolution for



WE don't mean to imply that any socks will last her soldier for the duration or longer. We *do* know that cast iron pipe in underground mains has served for more than a century—and there are many records, here and abroad, to prove it. The *known* useful life of cast iron pipe is at least double the *estimated* life of other pipe used for water, gas or sewer mains. Through avoided costly replacements that would be necessary with shorter-lived pipe, cast iron pipe helps keep down local taxes. It can be salvaged or re-used. It is the only ferrous metal pipe, practicable for underground mains which rust does not destroy.



Unretouched photograph of *more*-than-century-old cast iron pipe still serving and saving taxes in New York City.

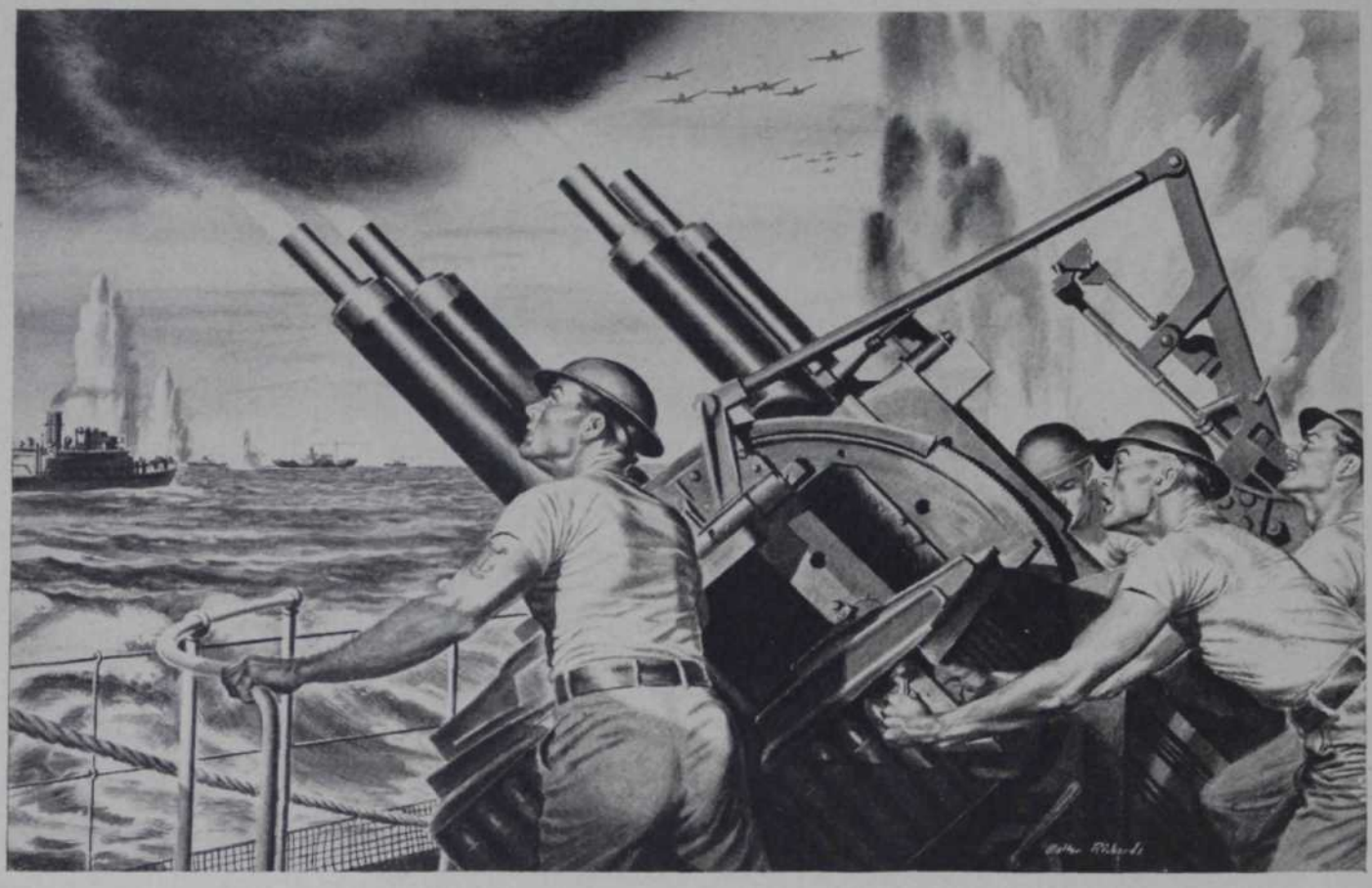
Pipe bearing this mark is cast iron pipe

Available in diameters from 1¼ to 84 inches.

CAST IRON PIPE
No. 1 Tax Saver

CAST IRON PIPE RESEARCH ASS'N, T. F. WOLFE, RESEARCH ENGINEER, PEOPLES GAS BLDG., CHICAGO

"TO PROVIDE FOR THE COMMON DEFENSE, TO PROMOTE THE GENERAL WELFARE"



Bad medicine for big bombers

ONE WAY to spoil a bomber's aim is to hang a curtain of steel over your ship and dare him to come down through it. To get that curtain of steel up there requires quick-firing, flexible guns.

To the plant of the Westinghouse Electric Elevator Company the Navy, a few months ago, brought its plans for such a gun. And to Westinghouse was given the important job of building the mounts that would control the aiming of these batteries of quick-firing guns.

And the Navy said, "Well done!"

Today, over the Westinghouse plant, there floats the Navy's "E" pennant—for excellence—eloquent testimony to the manner in which this Westinghouse plant performed the job. How was this plant able to get into growing production of these mounts so quickly? The answer lies in a Westinghouse characteristic called "know how"—the ability to get things done in the best possible way.

This Westinghouse "know how" makes itself felt wherever Westinghouse craftsmen build things. Whether for the common defense or the general welfare, this "know how" is doing a job. The same skill and ingenuity that made so many splendid things for peacetime living are now being applied to many important war weapons.

"Know how" will work for you again

We look forward to the day when we can give your home, your farm, or your factory the full benefit of Westinghouse "know how" again. To speed that day means just one thing to us: to produce, in ever-increasing quantities, the tools with which to get the victory job done.

Westinghouse

For the Common Defense

Sterilamps
Bomb Fuses
Tank Equipment
Military Radio Equipment
Plastic Plane Parts
Seadrome Lighting Equipment
Navy Ship Turbines and Gears
Blackout Plant Lighting Equipment

For the General Welfare

Air Conditioning
Electric Refrigerators
Switchboards
Lamps
Steam Turbines
Elevators

These lists mention only some of the many thousands of Westinghouse products.

WESTINGHOUSE ELECTRIC & MANUFACTURING CO., PITTSBURGH, PENNSYLVANIA

Copr. 1942, Westinghouse Electric & Manufacturing Co.

economy-in-government has recently been adopted by the directors of the Bluefield (W. Va.) Chamber of Commerce.

The Bluefield Chamber recommends for the duration of the war an end to federal spending for civil airports that have no military value—including the $3,000,000 Elgood project in its own community.

It asks suspension of C.C.C. activities—including the construction of a Skyline Drive above Bluefield by a local C.C.C. camp.

Bluefield's Chamber is opposed to further expenditures for new post offices and federal buildings—including the proposed allocation of $225,000 for improvements to the Bluefield Federal Building.

It condemns the construction of the St. Lawrence River power project in war-time, also the $22,000,000 Bluestone dam project at nearby Hinton, W. Va.

It would like to see a discontinuance until after the war of all spending on public park, swimming pool and similar recreational projects, among which is Pinnacle Rock State Park, five miles west of Bluefield.

Other non-essential federal activities which the Bluefield Chamber suggests should be curtailed to aid the war effort are: N.Y.A. spending, unless it has direct military value; suspension or curtailment of W.P.A. projects, and the elimination of employables from W.P.A. rolls; reduction of various aids to agriculture; savings by deferment of appropriations for highways, rivers and harbors; economies in state government which will permit diversion of tax money into the war coffers. In all these, Bluefield is willing to sacrifice its own government aid for the good of the cause.

Getting at the essentials

WASHINGTON riddle: What connection has the Fish and Wild Life Service with the war effort? Or the Tariff Commission, the General Land Office, the Grazing Service, the Tennessee Valley Authority or the Veteran's Bureau?

Frankly, we haven't the answer. We only know that, when the federal nondefense agencies were asked to survey their personnel situation and see whether or not any employees could be diverted to the departments and bureaus concerned with war activities, those just quoted were among the list that reported they were doing indispensable war work. Only eight agencies, with 9,500 employees among more than 220,000 in Washington, failed to claim war status.

Such "non-essential" work as making typewriters or driving taxicabs must give way to war's necessities, but wild life conservation or the building of power dams must not be touched. That seems to pass for sound reasoning.

A "closed barn" issue?

LAST month in our "Management's Washington Letter" we predicted a drive by John L. Lewis to unionize dairy farmers.

Since then it has happened as predicted. Lewis' United Mine Workers claim 27,000 dairy farmers already in the fold.

Unless dairy farmers have changed a lot, Mr. Lewis is in for trouble in this latest addition to unionism. How are you going to create any respect for the 40-hour week among men who unhitch their teams when the sun sets? And picketing non-union farmers hauling milk to market is our idea of a hazardous occupation.

Sins of omission

TWO radio commentators, at least, commenting on Secretary Patterson's report to the congressional committee on our production program, said that "government and labor" were doing a great job. Why no recognition for the real catalyst, management? Just oversight, no doubt. No design to discredit management but, after all the years of attack upon management, it is pretty hard to bring back into the picture the men who are assembling materials and workmen, devising ways of financing, transportation, and handling a thousand other intricate details, from raw materials to the finished product.

Government and labor indeed! Without deprecation, you could count on the fingers of one hand those in political life who could do the job that a Ford or Keller or the two Wilsons of G. M. and G. E.—and a thousand others—are doing in the war effort.

It remains to be seen if the new adjunct to management—labor union representation—will improve it or hurt it.

Bill White on the Chamber

WILLIAM ALLEN WHITE, Emporia, Kan., publisher, says: "The Chamber of Commerce modifies the innate cussedness of the average, selfish, hard-boiled, picayunish, penny-pinching, narrow-gauged human porker, and lifts up his snout, makes him see farther than his home, his business and his personal interest, and sets him rooting for his home community. The Chamber of Commerce is giving the first lesson in practical Christianity to millions of savages in America. It is not a full baptism, but it helps."

THROUGH THE "Land of Romance"



Hallowed shrines of history; the majestic Blue Ridge and Allegheny Mountains; glistening white beaches of the Virginia seashore; the noble Shenandoah Valley — adventure and recreation, rest and relaxation. These — and a warm welcome are all yours in Virginia.

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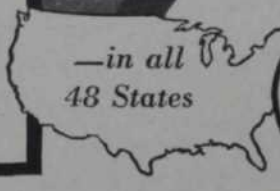
One of today's machine tool miracles: this 19 ton wizard performs 45 operations on a Cyclone engine crankcase in 24 minutes—formerly requiring 4 hours and 8 machines!

A WAR-TIME MIRACLE!

IN THE PAST 2 YEARS America's machine tool industry has produced more of the "machines that make machines" than all of the 10 years preceding! Yet this is only half the miracle. Today the average machine tool has 3 times the work capacity.

These miracle machines demand specialized oils. Oil for *turning*. Oil for *drilling*. Oil for *planing*. Oil for *milling*. Oil for *grinding*. Oil for *lubricating* these precision tool machines. Texaco meets this demand with high quality cutting coolants and lubricants, distributed from *more than 2300 wholesale supply points in the U. S.*—and with its specialized engineering service, on the alert for all industry.

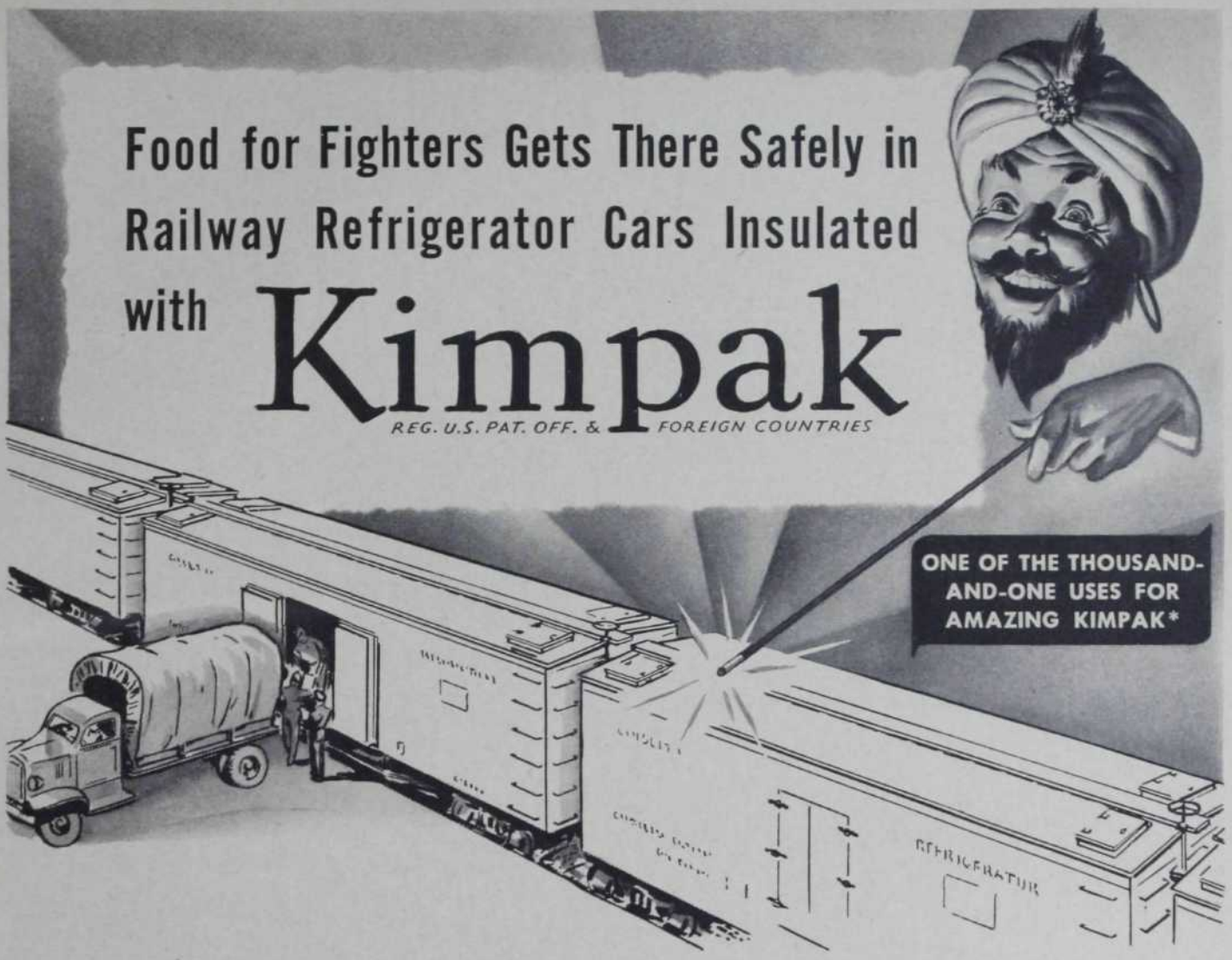
THE TEXAS COMPANY





Food for Fighters Gets There Safely in Railway Refrigerator Cars Insulated with Kimpak

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...One of the Busiest Materials in America!

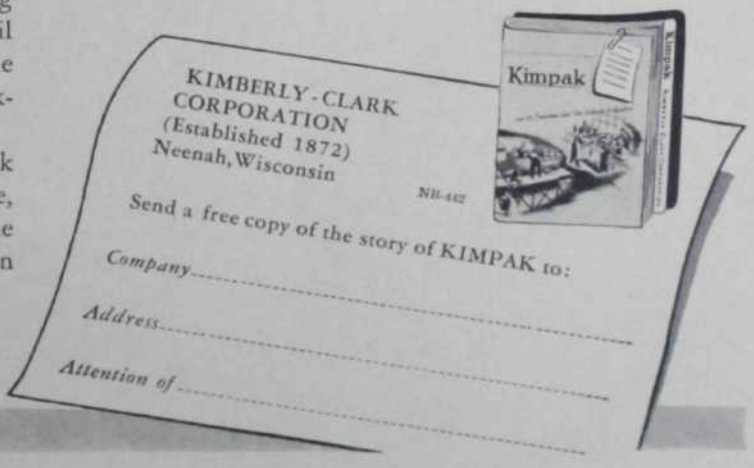
● Designers of railway refrigerator cars specify KIMPAK* to protect perishable foods from the damaging effects of extreme heat and cold. Here's a place where KIMPAK is used because continual vibration and violent shocks can't harm its insulating effectiveness.

Astonishingly adaptable, KIMPAK is a material of "a thousand-and-one uses." One type of KIMPAK provides efficient thermal and acoustical insulation that's flexible, light in weight and low in cost. Another type of KIMPAK combines features of porosity, absorbency and low flow resistance—characteristics required for the filtering of air, gases and liquids. KIMPAK makes used motor oil "better than new"... it removes impurities from the air inside industrial plants...it's even used in the making of beautiful rayon!

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To fit specific needs, KIMPAK is made moisture-resistant...fire-resistant...and moisture-absorbent! With special backings, KIMPAK resists abrasion. Moreover, KIMPAK comes thick, thin, and in any dimensions you need. And most important today, KIMPAK is *immediately available.*

Want to know more about KIMPAK and what it may do for you? Get a copy of recently published book "KIMPAK—AND ITS THOUSAND-AND-ONE USES IN INDUSTRY." Mail coupon now for your FREE copy!



*KIMPAK (trade mark) means Kimberly-Clark Wadding



It puts the finger on U-boats ...*fathoms deep!*

IN this nation's battle for the freedom of the seas, no ship performs a more unique and vital duty than the non-rigid airship — the familiar Goodyear "blimp." Its specialty is spotting submarines and mines.

The blimp's great advantage is that it can fly slow enough to see a raider lurking as deep as 90 feet below the sea; then hover motionless to drop its depth charges with bull's-eye certainty.

Today the Navy is operating new squadrons of Goodyear-built blimps over our sea lanes and in shore patrol. These new air scouts are the largest ever built. They can cruise for thousands of miles, stay aloft for days without refueling — their gasoline consumption is so low.

Our ability to produce these ships quickly and in larger size than ever before is due to Goodyear's years of pioneering in *all* branches of aeronautics. Since the last war proved the effectiveness of blimps in shore patrol, Goodyear built, maintained and operated its own fleet of airships — to be in readiness for just such an emergency as confronts the nation today.

Similarly in many new products we are now building to speed victory, ranging from bomber wings to combat tires for military vehicles, we are pioneering new advances in construction and design that will benefit the public when times return to normal. Goodyear is building for tomorrow — today!



Yes—Combat Tires! Even an anti-tank gun won't put these Goodyear combat tires out of action. They're used on military vehicles.

GOODYEAR

Nation's Business
APRIL • 1942

One War at a Time

WE ARE FIGHTING TWO WARS. We began ten years ago a war against depression, which developed into a war to make America over. That war still continues, as we gird our resources against Germany, Italy and Japan.

We entered both wars with a similar strategy. Appropriations of billions of public money. No regard for national debt. Spending, only, the solution. Millions added to federal pay roll through "selective service." Executive power increased at expense of courts and Congress. A "union" labor administration. Less work, more pay. Regimentation. Continuous warfare on owners and managers of property.

We entered the domestic war dancing and singing "Happy Days Are Here Again;" the second war, "Keep the Old Pork Barrel Rolling Along." Both substituted "Let Washington Do It" for "In God We Trust." Both have "Gimme" inscribed on their battle flags.

There is no desire here to raise a partisan question. Quite the contrary, because anxiety is growing as to our chances of losing our foreign war. Therefore, to get at the impediments to all-out effort, it is necessary to ask: Were we winning the domestic war by the strategy of 1933-1941? Nor is it necessary to answer "Yes" or "No." It is only necessary to state a non-controversial fact: The country in 1940 was about equally divided in opinion. The cold, unemotional tally sheets record that.

So we enter the foreign war with a nation divided on the domestic front. Again, no argument as to whether this ought to be. The fact remains: To get unity on the foreign issue, we should submerge the issues of domestic war.

It does not promote the war against Germany and Japan for Attorney General Biddle, at a political pep meeting, to declare that politics should not be adjourned, while its chairman sums up:

> The New Deal is more dynamic than Fascism and more revolutionary than Communism.

It does not promote singleness of purpose in defeating Japan and Germany to hear the left wing boast that "known Communist sympathizers are again finding it relatively easy to get government jobs."

Nor does the fanatical objection to any decrease of uplift boondoggling do anything but destroy the effectiveness of Washington's plea that the need for personal sacrifice is desperate. The plea to buy bonds, for example, the plea for, and promise of, a lower standard of living.

And so on to the end of a long chapter.

Every citizen who is worthy the name is behind our Commander-in-Chief in his foreign war effort. 100 per cent. He has doubts and misgivings when he sees evidence that the President allows the group around him to use the war effort in extending New Deal policies with which he, as a good citizen, may have conscientious objections.

We can lose the foreign war—and the domestic one, too—unless those citizens who are not too dumb to understand insist through their legislative agents, their Representatives in Congress, that a truce be declared in our domestic war, that no group or individual gains advantage during such armistice.

When Lincoln was urged by hot-heads in 1863 to accept England's challenge to war, he replied "One war at a time!"

That simple, yet sane example might well be our policy 80 years later—in 1942.

Merle Thorpe



It's *OUR* war now. It's up to *US*. And "us" doesn't mean only the young men in the Army, on the ships, in the air. "Us" means *"us"*—not to be confused with "they" or "them," meaning somebody else.

For every one of *them* now in action or in training, there are ten or more of *us* who have the duty and the responsibility of providing the guns, tanks, ships, planes, the astronomical quantities of other material and supplies upon which the winning of this kind of war depends.

It's a *war of production.* That's clear. It's *a war of movement.* That's clear too, in the military sense. But to us who are especially concerned with the nation's traffic, "war of movement" has a profoundly special meaning. Untold millions of dollars, tons of materials and man-hours of human time go into America's production. But it takes one more vital thing to make that production worth anything. It takes *movement—transportation!*

Transportation of the character and of the capacity that is essential now and for the future is a job for the carriers, particularly rail carriers, AND the shippers. They are partners in a Herculean task—joined by bonds of an awful co-responsibility to enable America's production to move, work, fight.

Together they have already left former standards and old goals far behind. But this isn't enough. Transportation has to do more—much more—to keep apace and ahead of our war production, now just hitting its stride.

There's the challenge. It is being met, and will continue to be met by shippers and railroads working together — *making every freight car do more work every day.*

NATIONAL ASSOCIATION OF SHIPPERS ADVISORY BOARDS

Reprinted by Association of **AMERICAN RAILROADS**

Wanted: Recruits

TO RECRUIT RECRUITS FOR

Behind the Line!

By WILLIAM J. CASEY

● SO, YOU WANT TO DO MORE on the war effort!

But, as a retailer, doctor, lawyer, dentist, school teacher, clergyman, insurance agent, you feel that you have no place in the nation's program of all-out production.

Well, you have! However unhandy you may be with tools, however small your home town, there is a job for you—a job that is important and necessary, that you can do at home.

Donald Nelson pleads for 25 per cent more production. Although you may not know a monkey wrench from a divining rod, you have knowledge and skill which can contribute to that program—maybe only as much as five per cent—but that five per cent could be the margin by which a battle was won, a campaign made successful, American lives saved, the war shortened.

Unless you and all of us stay-at-homes find ways to enlist ourselves in the army back of the lines much of this country's potential power will be wasted. For those who want to serve but have failed to find a way, this article by the Chairman of the Board of Editors, Research Institute of America, is a short training course.

THE bombs that dropped on Pearl Harbor blasted a great dissatisfaction into a small New England company that was making steak "tenderizers" for hospitals and restaurants. Although Army flying fields and post exchanges use a few tenderizers, the company regarded this as an insufficient contribution to the war effort.

Combining aggressive selling with mechanical ingenuity, it began a vigorous search for war jobs. It found 24, ranging from motorcycle crank cases and parts for a manufacturer of screw machines to heavy steel spouts used in moulding field guns.

Most of the jobs are done on the company's regular equipment. The engine lathe that used to make shafts and castings for steak machines now makes the spouts; a universal milling machine that once cut sheet steel disk covers for steak machines now cuts round steel stock into hexagonal nuts.

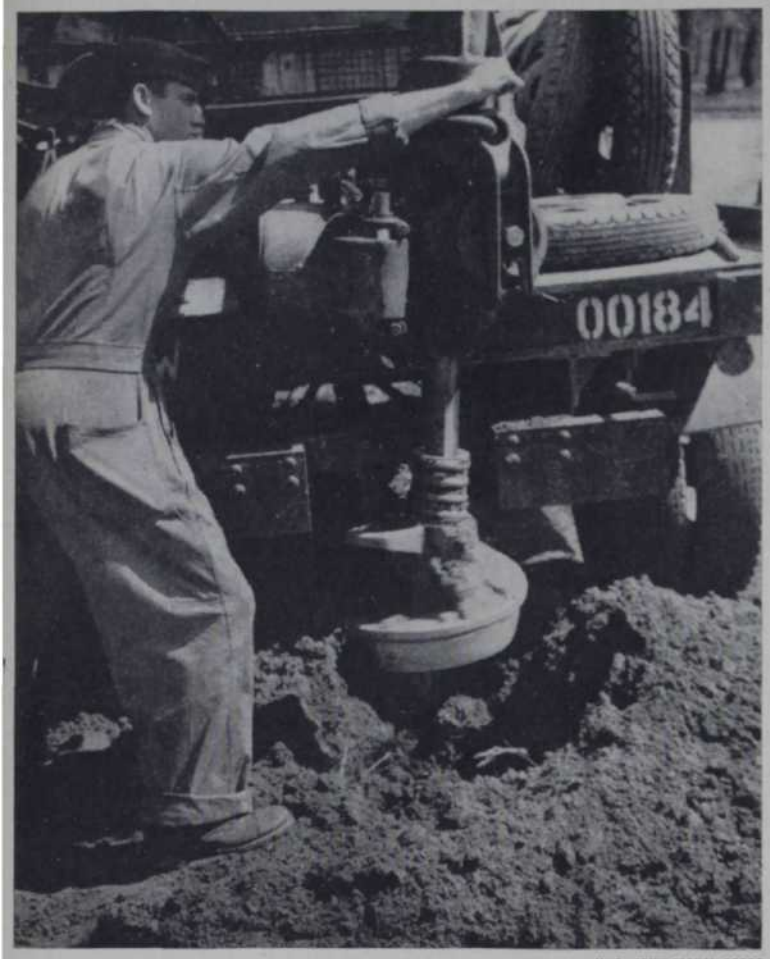
Nobody will get much excited about that story. It is the sort of thing we have had in mind when we boasted about our productive capacity:

"We'll turn out more stuff in a week than those Jerries can make in a lifetime!"

Somehow that theory does not square very well with the worries of informed men who predict that 375,000 small businesses and 1,500 one-industry towns face ruin because they can find no place in our war effort.

If that happens, a lot of people are going to lose their livelihood, the Government is going to miss some expected taxes, machines and skills which are a part of the industrial strength on which we had counted for victory are going to be wasted.

In a war where final victory will depend on materials, production and supply we can't afford that waste.



U. S. ARMY SIGNAL CORPS

The Army needs and uses many things besides weapons—post-hole diggers, for instance

Against us is the productive capacity of countries where every pound of material, every human life, is forged into a huge machine spouting destruction; where men, women and children of conquered territory are fed only if they contribute to the war effort; where the ruling hierarchy understands what war requires of industry.

The Axis, in taking on clearly superior industrial power, is gambling that we cannot mobilize that power fast enough to win. They are betting that their head start in military production will give them control of three continents before we can get geared to check them. They are parlaying this with the bet that they will be able to organize the resources of those three continents for full blast military use before we can turn out the planes, tanks, ships and guns to rescue the conquered territories. In short they are betting that we won't understand war until it is too late.

With us, production won't rest on a Gestapo. It will be guided from Washington but fundamentally the understanding of war must reach down to the roots of industry to bring a ground swell of individual resourcefulness and initiative in spurring production.

Primarily the task rests with executives, foremen and workers. Many of them have already demonstrated their ability to find a niche in the military structure:

Manufacturers of common pins have found jobs making needles for the Navy and doing wire work for parachutes; an umbrella manufacturer is using his equipment to make a spring release, similar to that in his normal product, for use in parachute frames; a Venetian-blind manufacturer is making folding wooden tables and wooden bows to hold up canvas truck covers; a manufacturer with fine screw machines has allied himself with a manufacturer of metal stampings to make electrical instruments for the Signal Corps.

It seems unreasonable to suppose that any plant with machines and the skill to use them cannot find patriotic work to do. But what of the rest of us—the bankers, insurance men, chamber of commerce secretaries, teachers, clergymen, salesmen—who don't know a horizontal reamer from a squalloping rod?

A few who found jobs

We can find jobs, too. Many such men have already found them:

A chamber of commerce secretary organizes machine shops and small manufacturing plants in his community to handle war work which none of them could handle alone.

A banker meets their payments for materials which might hold up a chain of war production stretching half way across the country.

An insurance agent spots an idle machine and tells another client who has work to be farmed out.

A paper mill uses its repair shop to machine parts for a war contractor.

A retailer makes his customers happy about simplification of design and reduction in sizes and models which releases scarce materials for the fighting fronts.

A doctor in Binghamton, N. Y., organizes a scrap collection which, in a short time, turns up enough scrap metal to make three tanks. A bowling alley proprietor and a theater manager in Newcastle, Ind., change hours and put on special shows to give night crew workers recreation which combats fatigue and bolsters their output. A country daily releases freight space by speedily unloading a car bringing in paper.

A beverage distributor lends some of his trucks to a nearby defense plant. A Long Island auto dealer lets out garage space for subassembly work on airplanes. A real estate agent scares up storage or floor space to handle production expansion in a war plant.

A stationery store proprietor tells his customers how to conserve on writing paper. A hardware dealer tells his customers how to use the tools he sells them correctly to prolong their life. A chain of gas stations makes its branches depots for a collection of old rubber, paper, and scrap metal.

One retired executive found 19 small shops with various abilities, got a contract for a war machine on which each could do a little. Now he coordinates their efforts and handles final assembly.

Perhaps few can do a job so spectacular but, on the other hand, few who have found even moderate success in business will find themselves entirely unfitted to help in some way. Even if their combined services add up to only a five per cent increase in war production, that five per cent may eliminate years of struggle, save thousands of lives, billions of dollars, years of high taxes and simplify the task of reconstructing a peaceful world.

How each can contribute to that is an individual problem but, in any case, knowledge of various factors will not be amiss.

Among industry's marching orders are:

1. CONVERT—Use machinery, plant, and managerial skill to turn out war goods. Go after war prime contracts or subcontracts.

2. CONSERVE—Use substitutes for critical materials. Reduce specifications to conserve scarce materials. Simplify products by cutting down on style, sizes, colors, etc.

3. RECLAIM—Salvage and either use or sell to junk dealers old rubber, scrap metal, waste paper and old rags.

4. CHECK METHODS—Get the most out of plant and equipment.

5. FARM OUT—Use outside help to speed production.

Let's find out something about them.

1 ★ The Road to War Contracts

He "loves'a thees'a country." Battleships and cities. This is another year. Machine tools are the key. Shoe machines make torpedoes. Bookbinders and fishnet makers. Thirty-two examples of ingenuity. Flesh and blood success stories. A mother hen and her chicks.

ON THE WRONG side of the tracks in a small middle western town sits Angastora's tin shop. Angastora has some tools and he knows how to use them. Moreover, he will tell you that he "loves'a thees'a country." Obviously, an all-out war effort which omits Angastora is passing up an able and patriotic worker. He can certainly contribute something—a single battleship needs everything (and more) that a small city would use—but imagine him puzzling out a government contract.

However, there are men in the town who could un-

Lack of scrap may reduce steel production but, in one town, the Lions' club dug up 2,000 tons; one manufacturer found more than 200

OEM DEFENSE PHOTO





This young woman is not wearing a monocle; she is testing lenses which are an Army and Navy necessity

derstand and whom Angastora respects. He will listen to what the chamber secretary, a trusted lawyer, his boy's school teacher has to tell him.

Whoever tells him ought to know this:

The problem of converting to war production is woven in with that of getting war contracts. The test of successful conversion is first getting and then completing satisfactorily a war contract. Moreover, priority help in getting retooling required for conversion depends on war contracts. The two problems must be tackled substantially as one with this difference:

Conversion emphasizes engineering problems. Landing war contracts is primarily a sales problem.

There has been a lot of discouragement and disillusion about converting and landing war contracts. Without question, manufacturers who could now be swelling munitions production have been turned away.

But an unsuccessful attempt a year ago or even a month ago is no measure for conversion prospects today. The volume of contracts to be let has multiplied and urgency in getting new firms in war production has intensified a thousand fold. But, perhaps most important, the procurement policy has been made more flexible. The road to war production may be traveled in any one of four main ways:

1. Market may be shifted from civilian customers to Army, Navy or lend-lease customers.
2. Existing equipment may be redesigned to turn out the usual product with minor adjustments to fit it for military use.
3. Existing plants and equipment may be put to work on war jobs entirely foreign to their original purpose.
4. A firm's management, technical skill and financial strength may be used to do an assembly job, to coordinate and supervise the fabricating activities of a group of small plants, to manage a government constructed plant on a fee basis.

There are other roads to war production. A plant may be entirely retooled to turn out military products. Time and machine tool limitations permit this only in the case of large-scale conversion of entire industries. Entirely new plants may be built and tooled for war production but here again the same factors will limit this approach to rare instances.

New jobs for old machines

Machine tools are the key to conversion. To get required war production quickly, even old and worn tools must be put to work. Government buying officials and prime contractors are looking for contractors and subcontractors to do specific machining jobs. The best approach to war work is to show that you have and understand any one of these needed machine tools:

Horizontal boring machines; vertical boring machines; radial drills; jig borers; gear grinding machines; thread grinding machines; hobbing machines; engine lathes; turret lathes; multiple spindle automatic screw machines; milling machines (vertical or horizontal); thread milling machines; planers; die sinkers; reciprocating table surface grinders; planer type milling machines; vertical shapers (not slotters); gear shapers, planers (Int.); cylindrical grinding machines.

Other machines for which prime contractors are looking are: chambering machines, deep hole drilling machines, internal grinding machines, tool room lathes, rifling machines, bar machines, reaming machines, four slides machine, automatic screw machines.

Other widely needed facilities are: alumiting parts, broaching facilities, die casting, forgings, foundry (non-ferrous), arc welding, surface grinding, heat treating, machine heat treating of ground parts, instrument makers, rubber compounding, tube bending.

Minor adjustments in equipment have put small firms in war work. W.P.B. engineers discovered that a spindle used in the construction of torpedoes is almost identical with certain shoe machine spindles. Thus, shoe manufacturers have been quickly put to

work on torpedoes. Jewelry manufacturers have been able to use their equipment to make electric meters for the Signal Corps. Woodworking facilities have been applied to wooden cases, Army ski poles, skis, and snowshoes for the Army.

Local W.P.B. offices are ready to put small manufacturers who can make conversions of this type in touch with prime contractors as well as with Army and Navy procurement officers. Thus, woodworking shops able to manufacture boxes for packing and shipping airplane engines, propellers, and other parts are directed to aircraft manufacturers as well as Air Corps procurement officers. Silverware manufacturers have been able to take subcontracts for framework and stampings. Manufacturers of bookbinding machinery have taken on turret lathe work on a subcontract basis. A fishnet manufacturer is making camouflage nets.

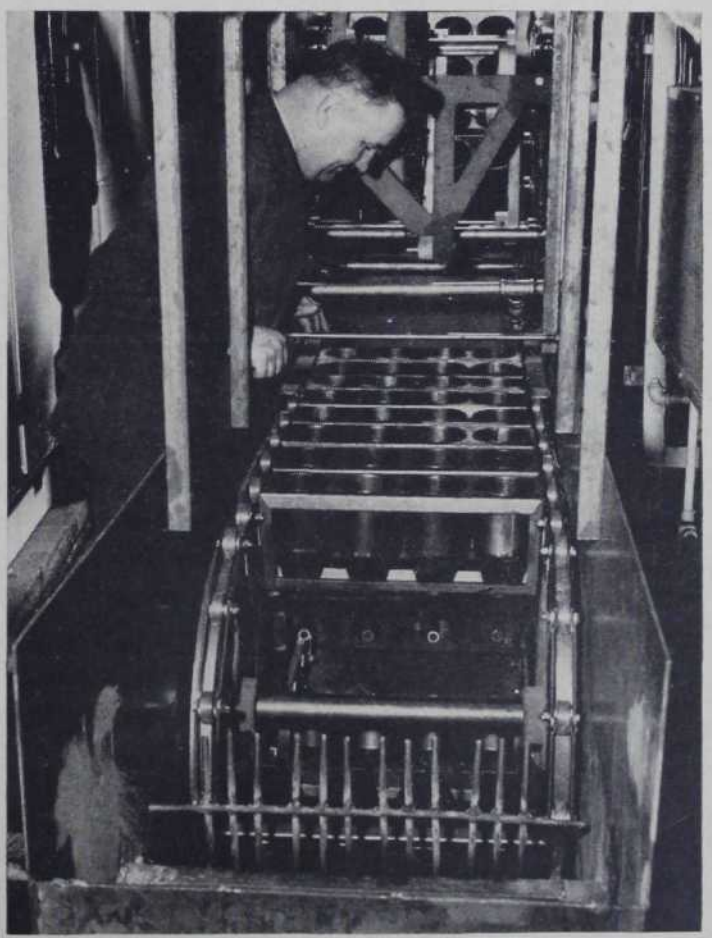
Manufacturers of all types of machinery are in a strategic position to switch over to production of machine tools. Printing-press manufacturers are making milling machines; textile machinery manufacturers are turning out internal grinding machines; manufacturers of shoe machinery are building toolroom lathes; manufacturers of woodworking machines are building grinders and gun machines.

What others are doing

Lists of typical conversions are to be taken only as guides. Whether or not a plant can be converted to turn out a specific military item is an engineering problem which calls for an engineering answer based on the size, facilities, and other productive resources available. The following list of typical conversions may include valuable suggestions:

PEACE-TIME PRODUCTS	WAR-TIME PRODUCTS
1. Advertising specialties	Cartridge cases
2. Automatic lead pencils	Ammunition components
3. Automobile accessories	Shells
4. Bicycles	Torpedo parts
5. Bottle caps, bottlers, dairy and packers' machine closures, cork insulation	Gun mounts
6. Builders' supplies	Shell caps
7. Canning and cooking apparatus	Fuses
8. Carpets	Gun barrels
9. Casters, wheels and furniture hardware	Fuses
10. Cigar lighters	Metal fuse parts
11. Clamps, magneto couplings, etc.	Fuses
12. Clocks	Bank-and-turn indicators, armament packing boxes
13. Coffee strainers	Flyers' kits
14. Costume jewelry	Bomb and torpedo fuses
15. Egg poachers	Percussion caps
16. Electric equipment	Cartridge cases
17. Enameled steel stamping, specialties and signs	Anti-tank mine
18. Felt washers	Fiber containers
19. Fireworks and toys	Signals, A. C.
20. Hair curlers	Aircraft assembly clamps
21. Lawn mowers	Machining shrapnel
22. Metal household specialties	Anti-tank mines
23. Office furniture	Bomb containers
24. Pipe fittings and valves	Hand grenades
25. Pumps and woodworking machinery	Machining artillery shells
26. Pumps, meters, valves	Fuses
27. Sheet metal novelties	Links, for machine guns
28. Shoes	Helmet linings
29. Silk ribbons (also silk goods)	Silk, parachute, pyrotechnics
30. Springs and metal stampings	Gas-mask parts

The Government just doesn't have enough men to go out and convert everybody who can be converted.



OEM DEFENSE PHOTO

Most plants can find a place in the war effort as did this former maker of bottle washing machinery

The firms which have been most successful in converting have used their own production and engineering talent or hired it on a fee basis. Those discouraged by futile conversion attempts should remember that most of those who have converted successfully started a year ago or earlier.

The Government's conversion machinery is useful as a lead to more work after conversion possibilities have been explored and substantially worked out. The secret is to exhaust every possibility for suggestions and leads but don't count on them entirely. The following sources should be used:

1. W.P.B.'s Contract Distribution Branch has more than 113 field offices whose job is to promote conversion and lead manufacturers into war work. These offices are staffed with engineers ready to analyze plant facilities and consult on conversion possibilities.

2. For years the Army Procurement Planning district offices have been surveying plants, drawing up blueprints for conversion from peace-time production to military production, and helping plants to make that switch. Army engineers operating from these offices are still making surveys and throwing out suggestions and advice.

Ordnance recently ordered a substantial expansion in civilian engineering personnel available for this job at local ordnance offices.

3. The Navy has stationed commissioned production engineers in the Contract Distribution field offices to steer available plants toward Navy contracts and subcontracts.

Old rags may not win the war but they can help; in England they are even saving grease—it makes soap

OEM DEFENSE PHOTO



Local W.P.B. or Army Procurement offices have advance information on items which the armed forces want to buy. They also list work which prime war contractors are ready to farm out. Many military items are exploded into thousands of component parts with detailed production information. Exhibits and samples are available for study. The manufacturer who comes with a description of his facilities can have an engineer check them with an eye to conversion. His plant may be surveyed if it looks promising.

Help for the puzzled

These offices have even helped in preparing bids, setting up cost estimates, and working out production methods. Frequently conversion is worked out by finding other plants and shops to round out facilities and to do part of the job. Where this can't be done, Army and W.P.B. offices may give a manufacturer priority backing if he needs new machinery and equipment. These offices have been instrumental in getting specifications changed if the change would permit the use of existing facilities.

This machinery has been translated into lots of flesh and blood success stories.

Two years ago, one of the many small, ambitious manufacturing firms in an eastern city was grinding out aluminum frying pans, egg poachers, radio dials and control devices. Today it is producing percussion caps, struts, flap hinges, and other aircraft parts.

There seems to be no limit to the out-of-the-way sectors of American industry which have found a place in war production: A Fifth Avenue manufacturer of platinum and diamond jewelry is going 100 per cent on nine different medical items. Other jewelers are working parts for machine guns, bombs and ordnance items. A firm whose 140 employees were working on houseware orders in November now has 200 employed in turning out bullet dies. Another company whose 12 employees manufactured metal games for children and orange squeezers for housewives now has 75 employees working on $800,000 worth of gauges, dies, and bullet punches.

They are using second-hand machinery obtained by buying out two tool and die plants.

A decidedly small silverware manufacturer is producing reflectors, instruments, and other metal items for war use. Hand skills—spinning, stamping, pressing, chasing, polishing, and the old machinery, spinning lathes, polishing wheels, drop hammers with their

forcers and moulds, knuckle presses, hard soldering apparatus, etc.—are working for the armed forces in an old-fashioned New York loft.

A manufacturer of drapery fixtures is using its automatic screw machines to machine parts for incendiary bombs on a subcontract basis.

A sales manager who is on the ball can help a company stay in business by studying the new markets. There are many products, not far removed from those manufactured in peace-time production, to which the company can turn if the sales force is clever in seeing the need. Consider the lingerie manufacturer who suddenly discovered that he could make camouflage netting or the silk hose manufacturer who started making parachutes.

There are thousands of cases like this. They even come down to manufacturing the same product, but for a war-time need. Thus, a typewriter manufacturer discovered a new market for portable typewriters when his salesman learned that bombing planes carry portable typewriters for report writing during flight.



OEM DEFENSE PHOTO

Merry-go-rounds are less important today than war materials, so this company changed over to help

Teamwork for conversion

The small manufacturer who lacks the technical equipment to get into war work on his own can form part of a "mother-hen" group in which small manufacturers with suitable machine-tool equipment cluster about a large firm having financial, managerial, and technical strength. The large firm goes after war work as a prime contractor but farms out the fabrication work to smaller units.

Almost any enterprising private contractor can do what the Cleveland Ordnance District did under Lieutenant Colonel H. M. Reedall. Some 500,000 fuses were needed in a hurry. Colonel Reedall's office broke a set of blueprints down into detailed drawings for each individual part. These drawings were submitted to manufacturers who were requested to bid on any or all of them. Nineteen successful low bidders were called into a meeting and invited to bid for the prime contract. When the prime contractor was selected, the Ordnance District Office assigned to him the firm bids of the successful parts bidders. Thus, the prime contractor immediately had a complete line-up of subcontractors.

In actual operation the prime contractor produced some of the parts in his own shop and did the final assembly job.

The defense production associations or production pools have grouped together to handle important war work in many cities. In some cases, as in York, Pa., the pool has been a clearing house of all machine tool facilities in the community and has tried to match the facilities of plant groups so that war work could be carried through. In the more formal types of pools, one individual is put at the head of a concerted drive for war work.

Where legal difficulties can be surmounted, the pool itself may take the contract. Frequently the armed forces send for one of the group to act as prime contractor and to parcel out the work in subcontracts. One defense association recently got a prime contract for land mine fuses which was then handed out to a subsidiary group consisting of 12 of its members. A pencil manufacturer, a die caster, a scale producer and several screw machine shops, not one of which could handle the job alone, were thus put on war production.

In selecting the facilities to be combined in an association, care must be used in the grouping. For instance, in the metal-working industries, machine shops, forge shops, sheet metal shops, foundries, etc., naturally group into a complete production unit. In most cases, Defense Production Associations are organized to produce specific types of war goods or material.

Groups or firms wishing to establish pools should get in touch with their nearest W.P.B. Contract Distribution Office for full details and for clearance with the Department of Justice as regards the anti-trust laws and the Walsh-Healey Act.

Most companies seeking a war contract are wangling for the biggest customer they ever approached. They

face a selling job on the War or Navy Procurement Office. They must be familiar, not only with government buying methods, but with the red tape that inevitably coils around government procurement.

Selling the Government is still a selling job. Military procurement officers must be impressed with the seller's experience, ability, financial strength, engineering and production talent, machine and man power, and general reliability.

The Army and Navy want munitions at any cost. But price is still an important factor. Prices should be cut to the bone, if necessary, to get started on war production. High-cost orders are generally placed only when they serve to develop a new source of supply.

Army and Navy procurement officers feel that the engineering and production staffs rather than the sales force should solicit prime contracts. But technically competent salesmen, salesmen familiar with a product, can frequently fill the bill. The pressure of war has already loosened up procurement policies. Military supply contracts will be let by negotiation rather than competitive bidding except where the War Production Board's Director of Purchases specifically calls for competitive bidding. The emphasis will be on conversion and production for war at any price. Quick delivery—Nelson says that a ship this year is worth ten next year—will be the first consideration in letting war contracts. Profiteering will be checked after the job is done.

No apology needed

The tough and complicated jobs will be parceled out to the larger firms. The simpler and more standardized work will be reserved for the smaller, less well equipped firms.

If a firm has the equipment and still hasn't been able to land a war contract or subcontract, somebody has fallen down. Either the manufacturer hasn't presented his case clearly enough, or the government offices haven't done their job.

Many business men have fallen into the habit of scraping the floor when talking to government officials. That's wrong. Those who have anything that they think can contribute to the war effort—machinery, plant, materials, brains or just sweat—should *say so without apologizing*.

Just as in peacetime, many a war sale is landed because the customer got tired of saying "no."

Take the case of the Heath Company, Benton Harbor, Mich., manufacturers of airplane accessories. When the Government shut down on training planes, the plant shut down, had no contracts and no apparent hopes of any. All but a few of its employees were idle. They bounced around Army buying offices, the War Production Board local offices and finally Washington looking for contracts for weeks.

One squawk was all

The firm sales manager squawked in the columns of a Chicago newspaper. The next day offers of help began to flock in. Manufacturers wired for information on output. The War Production Board's Chicago and South Bend offices called to offer assistance. In 11 days the plant was again moving on war contracts.

Those who seek prime contracts, subcontracts or help in converting to war production should put on paper a detailed, clear and interesting statement showing equipment, ability and experience. Angastora's tin shop, for instance, would do well to answer these questions:

1. Business background—products made and with what success.
2. Previous experience in war production.
3. Peace-time production experience which in any way fits you especially for the kind of war production job you seek.
4. Financial statement.
5. Earnings record for a representative number of years.
6. List of important customers.
7. Description of plant, its construction, age, floor space, land available for expansion, etc. Photographs help.
8. Location of plant.
9. Transportation facilities.
10. A list of machine tools and equipment, describing in detail the type, size, manufacturer and serial numbers, age and state of repair, previous use, etc.
11. Tolerance to which shop usually works and closest tolerance to which shop has worked.
12. Complete description of assemblage facilities, patent shop equipment, plating equipment and foundry equipment, if any.
13. Describe facilities for handling materials.
14. Power sources.
15. Shipping facilities.
16. Water supply.
17. Number of idle machine hours weekly.
18. Experience and ability of engineering and technical personnel.
19. Experience and ability of managerial and supervisory staff.
20. Description of skilled labor now employed.
21. Labor history—turnover, strikes, etc.
22. Wage rates.
23. Make-up of personnel—migratory, alien, etc.
24. Available labor supply—competition for labor, prevailing wage rates, etc.
25. Number of shifts now operating and length of each. Number of shifts which could be worked with available labor.

26. Plans for war production, studies made or other background for these plans.
27. Something about production methods.
28. Training efforts and possibilities.
29. Additional factory space available.
30. Inspection facilities available.

Granted that Angastora won't have the answers to many of these. Granted further that he will think some of them silly, or nobody's business. Remember that Private Jones doesn't regard his sergeant as a master mind. But he obeys because we are trying to win a war. Angastora, we believe, has the same goal, and obedience will not get him shot at.

2 ★ On With the New

A struggle of metals. Where plenty still reigns. Ship sinkings mean tighter belts. No magical transformations. Glass brings you music. Russia's industrial risks pay dividends. 150 specifications. Rules that save rubber

EVEN a brief look at a raw material map of the world shows that a deficiency in any one of a half-dozen materials could choke our now mounting production and prolong the war for years. In six weeks the Japanese knocked out one-quarter of the United States' supply of chromite and three-fourths of the United States' imports of tin.

We don't go very wrong when we think of the war as a struggle with metals, but the shortage goes far beyond metals. Because the 20,000 parts that make up a pursuit plane must each be wrapped separately and because the flow of munitions and food to the fighting fronts must be substantially packaged, we are running desperately short of heavy kraft paper. That is only the beginning of the shortage story. The list of materials under priority control is long. Those of which there is relatively plenty—lumber, glass, cement, ceramics—are increasingly few.

How far most of us can help in a program of substitution is problematical. We can at least accept what we get with good grace and make better use of materials we already have. We might, if we were certain of our knowledge, offer helpful suggestions to people like Angastora and warnings to people who feel that they are outside the fields where substitution may be necessary. Most likely they aren't because as ships are sunk and the tide of war stretches out shipping lanes, the shipping bottleneck grows. At the same time, the vast appetite of our war machinery demands greater quantities of manganese, copper and nitrate from South American ports. As these essentials are given cargo



OEM DEFENSE PHOTO

No small shop could turn out a machine like this, but many of them could make one or more of the thousands of small parts used in it

space, coffee and other ordinarily plentiful commodities are left to gather dust on the docks. Shortage, like a contagious disease, tends to spread to more and more commodities.

The battle of materials has been fought with a variety of techniques, each one more drastic and more vigorously applied as it replaced or superimposed all others. Much of it is mandatory. But there is still a widespread area for voluntary industrial action to stretch thin supplies and to avert work stoppages or slow-downs while waiting for a shipment of material which cannot come through. Stretching raw materials is called conservation in the Government and the Government's part is centered in the War Production Board's Bureau of Industrial Conservation. That Bureau's structural breakdown indicates the fronts on which industry is expected to function. There is a Substitution Branch which promotes the use of less scarce materials instead of the critical ones. There is the Specifications Branch which is out to change the government specifications to eliminate non-essential uses of critical materials. There is the Simplification Branch which is out to simplify products, cut down on the variety of sizes, models and colors. Finally, there is the Salvage Branch set up to fight material waste in manufacturing processes, and to promote the reuse of stuff which would be junked in normal times and the collection of scrap to be put back to industrial uses through dealers in junk.



OEM DEFENSE PHOTO

War's impetus for better methods inspired the building of this home-made machine for a special job

Substitute materials can be divided into three general classes:

Replacement materials are those which the purchasing agent is able to supply quickly and in sufficient quantity to take the place of the old material. Most important, it requires only a minimum of change in product design and processing in the factory.

Alternate materials have no functional effect on the product but change the entire manufacturing arrangement of the factory. Need of brass for cartridge cases may stop the sale of metal trays and leave only those made from glass ceramics or plastics on the market. The factory and tools which made the brass trays can now make the glass or plastic trays.

New materials to open new fields are generally slow in coming. During the last war, aircraft was made of spruce wood and fabric. All-metal planes were still in the laboratory stage. Necessary fundamental experimental work with strong aluminum alloys and stainless steels took ten years. No magical transformations in the use of materials are likely but substitutes which have been worked out and developed for years are coming into practical use almost every day.

Plywood was an idea centuries old before its combination with new adhesive materials made it really practical construction material. Recently plywood has been substituted in bombers for bomb bay door, antenna masts, and in other places where it is not necessary to hold tolerances. In secondary training planes it has been used for wing covering and sheathing. Plastics had a background of half a century before they got well in motion.

Parents of substitution

Necessity is the mother of substitution; the father is research. When priorities forced manufacturers of professional recording disks—the kind that bring you "music by transcription" over the radio—to abandon aluminum as a base material, many a groan was broadcast. Tests showed cardboard to be unsatisfactory. A thermo-plastic resin had the disagreeable quality of oozing away under pressure. Oven-baked resins warped or became floppy like pancakes. Steel had roll marks from the mill which had to be removed by an exorbitantly expensive process before the lacquer could

be applied. Zinc would have been excellent but it was hit by priorities.

The research engineer sent for a box of aspirin and work started all over again. Someone suggested tempered glass. It proved the ideal solution! The superior "substitute" has come to stay.

There has always been substitution, in the Stone Age, the Bronze Age which succeeded it, and the Iron Age. Today plastics are replacing many metals; aniline dyes have been substituted for indigo—what one calls *normal* technological progress. Today we face the necessity of rapidly developing new materials to make good key shortages. But that is not all. American industry must make better utilization of materials that have always been available. Glass and porcelain are not new but, to save nickel, we may have to take iron containers lined with glass or ceramic instead of pure nickel. The risk of breakage may be greater. We may have to replace the ceramic container five times in the course of a year where the nickel one lasted for several years. But here is where the change of attitude will have to be made. Nickel in armor plate may save the nation a battle. Glass in an acid vat may mean a few man-hours of work in repair and replacement or additional cost due to frequent replacement. But we will have to put in those extra hours of work if we want to win military victories.

Russia dared take risks

Business must take extraordinary technical risks in war just as the Army and Navy take military risks. The Russians built blast furnaces and rolling mills in inaccessible areas of the Urals such as Magnitogorsk, despite the fact that in smelting the available type of ore they were taking both a technical and economic risk, knowing that the strategic military advantages would in the end outweigh them.

The area of substitution has been dwindling sharply. The substitutes themselves are becoming scarce. The following table indicates the materials which can be safely used as substitutes, and the materials which might be used in place of the most critical ones which themselves are not plentiful.

Galvanized steel in place of copper and aluminum window strip.

Clay instead of cast iron for gas-stove burners.

Plastic, steel, glass, or clay products in place of brass for zippers.

Paper or wood in place of metal for containers.

Initially, a reduction in the thickness of nickel layer in plating; and, subsequently, recommendations of silver, lead, and tin plus chromium to save both copper and nickel.

Wallboards of wood in place of stainless or enamel steel for refrigerator construction.

Substitution of ruthenium for iridium as hardener in platinum jewelry.

The introduction of zinc base die castings with lower aluminum content to permit increased production in view of the aluminum scarcity.

The substitution of zinc base die castings for aluminum base die castings.

The general specification of cornstarch for foundry core binders in place of scarce imported tapioca.



Unless we use every available tool, however small, we are wasting part of our boasted production capacity

Substitution of lead-coated or painted steel in place of brass and bronze for badges and ornaments.

The substitution of porcelain enamel, silvered glass, or indium plate for aluminum for reflectors.

The substitution of plastic-wood handles with steel tube inserts in place of aluminum construction for spray guns.

Closely related to substitution is the revision of government specifications. There are now more than 150 federal emergency specifications which replace peace-time specifications and cut down on scarce material use. Reference to these specifications will indicate a long string of substitution possibilities. Tinned steel cooking utensils are replacing aluminum equipment in kitchens. Galvanized iron is being used in laundry



Even Mars looks for substitutes, in this case a plastic hard enough to replace steel in shells

equipment. Aluminum has been replaced by non-metallic materials for table tops, by wood and steel in chairs and by mirror glass in reflectors.

Twenty-two major items, calling for the use of rubber specifications, have been revised to eliminate critical materials in four cases and to reduce sharply the amount of rubber required in the other 18 pieces of equipment. Of 17 army supplies containing silk, critical materials have been eliminated from 14 items. Mercerized cotton thread is being used in the sewing and stitching of thousands of garments where silk was formerly specified.

Specifications may be changed to speed up war production as well as to save materials. This can best be handled by taking the matter up with the Procurement Officer on a contract and having him put the matter up for final decision to the Standardizations Branch of the Quartermaster's Corps, the Production Engineering Branch of the Air Corps or whatever the appropriate place may be.

A proposal to ease up specifications will be considered from these angles:

1. Will it seriously impair the usefulness of the product?
2. Will it speed up production and delivery of urgently needed items?
3. Will it conserve critical, scarce or strategic materials?
4. Will it permit more complete utilization of plant and equipment?
5. Will it simplify inspection and acceptance tests?
6. Will it result in lower ultimate cost?

3 ★ Don't Throw it Away

Iron mines in back yards. The Lions turn prospector. "Any rags, any bones, any bottles?" England takes grease to the butcher. Enrolling 125,000 peddlers. Look twice at a broken gear.

SOME steel mills have only enough scrap to support 24 hours of operation. A depressing element in the production outlook is the fact that the 1942 steel production may be less than that in 1941. There are more steel mills and as much iron ore but there is not enough metal scrap to support maximum production. Iron and steel scrap must account for 20 of the 87,000,000,000 tons of steel on the 1942 production schedule. A pound of scrap accounts for four pounds of steel and the W.P.B. will tell you that even in the smallest of towns there may be enough scrap in the backyards to make one war tank. All of us can probably help with this. The Lions' Club in Fabian, Texas, dug out 2,000 tons; a New Jersey textile manufacturer dug up more than 200 tons; the Department of Agriculture has its county agents scouring fallen houses and barns for metal scrap.

The major drives for scrap involve scrap metals, old rubber, old rags and waste paper. Reclaimed old tires, tubes, boots, shoes and garden hoses are depended upon to keep manufacturers of a long line of rubber products in operation. Roughly one ton of waste paper will produce 1,500 shell containers, 30,000 practice targets, 71,000 dust covers for airplane engines.

Next on the scrap agenda may come tin cans and fats and oils. The Packing Institute of America and the Collapsible Tubes Manufacturing Association have organized 60,000 drug stores to become salvage stations in the collection of collapsible tubes that have been used for toothpaste, shaving cream, etc. Test campaigns on tin cans are under way at Serawan, N. J., and Pittsburgh, which are close to de-tinning plants. Tin cans are also being collected in the Dallas, Houston and Kansas City areas where the R.F.C. is building three plants to shred cans.

In England and Canada fats and greases are collected. The salvage campaign is now being tested in the Chicago area—idea is to urge housewives to take fats and greases back to the grocer or butcher. They

will then be taken to a rendering plant which will convert the collection into soap. The most important thing is the glycerine byproduct.

The W.P.B. policy is to have collections handled through the 125,000 peddlers, 14,000 scrap dealers and 1,000 brokers which make up the salvage industry, enlisting their sorting and grading scales as they must if scrap collections are to yield maximum value.

Closely related to collecting scrap is the war on industrial waste. Industrial salvage departments where many kinds of materials, such as wire, bolts and waste paper are reclaimed, reconditioned if necessary and either reused or sold, are encouraged and in some plants department committees have been formed to study every item of daily use and to determine how its life could be lengthened or renewed. In this direction emphasis must now be on conservation of materials rather than dollar savings. The repair cost of a broken gear or shaft frequently exceeds the cost of a new gear or shaft. However, the probability is that a new one could not be obtained and, if it could, it would be at the expense of some other firm which needed it for war production.

4 ★ Getting More from Less

$3,000 worth of lost motion. Give machines a chance. Twice as much work in same space. A plan that helped speed output. Second hand planers and shapers. 70 shortages relieved. The inexpert can help.

DONALD NELSON has said that it is possible to get 25 per cent more production merely by making better use of the tools we have. That is not as impossible as it sounds because, throughout the industrial battle front, millions of parts are being assembled and millions of machinery operations are being performed the wrong way. This costs time, manpower, machine power and wastes scarce materials. Industrial engineers and method men have produced spectacular rises in output by analyzing manual and machine operations, putting the right way down on paper and selling workers on using the right method.

A comparatively small New Jersey manufacturing firm hired one motion study man and gave him an appropriation of $3,000 for material and labor. From a total of 203 operations, he selected 48 as worthy of study. By eliminating unnecessary operations, planning operations, shortening travel of parts and materials, adding to operator comfort, seeing that simplest form of draft was used, balancing hand motion, and similar steps familiar to methods men, he cut labor hours 33 per cent per year on most jobs.

There are four basic possibilities for getting more out of the machines we have:

1. Better operating methods.
2. Enlisting machines not now on war work by subcontracting work to them.
3. Using machines a greater number of hours per day—hitting the theoretical maximum of 24 hours a day seven days a week if possible.
4. Getting more out of available labor skills by simplifying operations, building worker morale, etc.

One manufacturer of glass products was able to increase the output of his automatic screw machine department by 30 per cent with only ten per cent additional labor; a large middle western steel mill raised the capacity of its repair shop by 80 per cent without adding a single man. One small manufacturing firm, by carefully surveying its operations and improving inventory control, scheduling and plant layout, increased its efficiency to a point where it produced the



OEM PHOTO

Even side street garages have skill and machines that could contribute their bit to win the war

same volume with one shift as formerly with two. No additional factory space was required.

A manufacturer of metal products was falling behind delivery schedules. An engineering survey revealed that 85 per cent of manufacturing time was idle time, much of it spent by workers and machines in waiting for next operations. A scheduling system was installed which planned work in advance, scheduled work throughout the plant to reduce waiting time to a minimum. Output increased sharply.

Another manufacturer found that his gear tooth rounders could handle in a single shift all the work which his gear hobbers could feed in two shifts. Instead of doubling the number of gear hobbers, he installed the latest type of gear rounders to balance out his production. In similar cases, the bottleneck has been broken by using another firm to do enough of the machining to balance out production.

All-out production demands the use of every piece of equipment which can be put into operating shape. Old and second-hand planers and shapers, milling machines, drill presses, lathes, grinders and boring mills can still do a good job, although they will not work as rapidly as new equipment or have as much power or rigidity. New equipment may have better slides, better bearings and wheel adjustments, but the veterans can frequently be operated by less skilled men. The finest equipment, automatic and semi-automatic, performing many operations at one time, should be reserved for specialized war production.

In a recent speech, George T. Trundle, Jr., President of the Trundle Engineering Company of Cleveland, Ohio, made the following recommendations:

If an old machine will not hold a reamed hole to size, rough it on the old machine, take it off and ream it on a more accurate machine.

If an old machine won't hold the thread to size, rough it on the old machine, take it off and run a die over it by machine or by hand.

If an old machine won't hold concentricity or an accurate outside diameter, make a secondary operation of it on another machine.

You would be amazed at the production possibilities of a large battery of bench lathes, bench milling machines, and bench drill presses, for secondary operations on small parts. And here is a further angle on secondary operations.

I am convinced that considerable production time is lost in certain cases by attempting to perform, on modern multiple-operations machines, *all* of the operations which they are capable of performing.

Take, for instance, a machine that is supposed to perform 15 operations. One particular operation out of these 15 may

Already W.P.B. is enlisting 125,000 peddlers, 14,000 scrap dealers, 1,000 brokers to make salvage yield a maximum of value

OEM DEFENSE PHOTO



be an operation which requires special accuracy. It may also require unusual skill on the part of the operator.

If there is any trouble with this particular operation, it slows up the productivity of the machine with respect to all of the other 14.

My answer is—take this one troublesome operation off this multiple-operation machine. Let the new machine perform the other 14 operations which it can do without any delay and trouble. Make this one particularly difficult and accurate operation a secondary operation. Put it on a single-purpose machine set up to do that particular job, with an operator trained to do that particular job.

By that method, you can keep the new machine going full tilt in the hands of an only slightly experienced operator, who can watch the automatic functioning of the 14 operations which are easy—and keep up with the machine by putting the only difficult operation into another machine, in the hands of an operator who can be trained to achieve the accuracy required.

We must somehow break down our operations so that they will not require a large number of men trained to a variety of operations. We haven't time to train men for all these operations. We must set up our production equipment and plans in such a way as to make maximum use of men who are trained to perform one particular operation on one machine. There simply isn't time to train enough men beyond that point.

Crowded floor space can be deadly to production schedules. A company manufacturing sheet metal products lacked sufficient floor space. The study of layout and flow of materials led to new improved layout. They gained 20 per cent floor space by:

1. Locating equipment to expedite flow of materials instead of the old-fashioned method of aligning machines in straight lines.
2. Placing equipment where needed, not necessarily grouping similar types of equipment.
3. Establishing centrally located storage facilities for supplies and goods in process.
4. Reducing waiting time between operations, thereby reducing storage space needed to store goods in process.

Some shortages of standard parts and materials have been relieved by obtaining the necessary items through an inter-company "inventory-record system." The Weatherhead Co., Cleveland, for example, maintains a card file listing monthly reports of supplies in each of 2,000 types of fittings in the hands of 20 airplane makers supplied by the company. Manufacturers lacking essential parts can frequently locate surplus supplies over the telephone or teletype, by reference to this file. In two months more than 70 shortages have been relieved in this way, resulting in the transfer of more than 100,000 fittings.

Most of us aren't motion study men or production experts. But, when we hear men in our town complain about inability to meet military demands for speed, we can emphasize the need, throw out some examples, and make suggestions:

1. Make "improve while you work" the plant keynote and don't let cost block speed and volume.
2. Make an over-all check of your operations from the purchase of raw materials right through to the shipping of the finished product.
3. Adjust your buying to the priority system.
4. Tighten up your inventory control.
5. Provide adequate unloading, handling and storage facilities.
6. Balance your equipment and concentrate on eliminating bottlenecks by rearranging operations and enlisting subcontractors.
7. Set up definite production schedules and stick to them.
8. Use old machine tools but don't hesitate to seek new machinery when it will expand or speed up production substantially.
9. Don't neglect maintenance and repair.
10. Don't neglect salvage possibilities.
11. Will standardizing, simplifying, or getting specifications changed speed up output or save material?
12. Break down and simplify work operations, set up definite production standards and consider bonus and incentive wage systems.
13. Inspect each operation as frequently as possible.
14. Keep your top men constantly informed on the progress of work and performance records.
15. Enlist the help of War, Navy and W.P.B. experts to improve your production methods.

5 ★ Many Hands Make Light Work

A nation of specialists. Managers get real test. Opening for talent scouts. Clock makers form a pool. Australia finds an answer. Case histories of plans that work. Five per cent would help. Opportunity for those who seek it.

THERE is no magic in farming out work. The entire industrial system under which America operates has been built on the principle of sending work on specialized parts to persons capable of producing those parts so that the prime manufacturer's plant capacity was kept open for work on the larger or more difficult pieces and final assembly. In ordinary times there are many parts which every manufacturer finds expedient and perhaps essential to buy from others. Bolts, nuts, springs, electrical motors, as well as parts designed for a particular product, but most satisfactorily produced by a specialist, are bought outside of the prime manufacturer's plant. The manufacturer of freight cars buys his brake shoes, for example. The wheel manufacturer frequently buys his ball-bearings elsewhere.

The two major points that are new as far as farming out for war production is concerned are, first, the subcontractor must frequently do a job that he never has

done before; second, the scale and complexity of war production require a deftness and aptitude in managerial abilities that may dwarf that required in a subcontractor's peace-time activity.

When making a product with which the prime manufacturer is thoroughly familiar it isn't easy to control the flow of subcontracted parts so that a regular stream of them comes in on schedule to fit into the exact place and time that assembly line production demands. Doing this on a scale more vast than ever attempted in peace-time, on articles which many of the prime manufacturers, and practically all of the subcontractors have never made before (with the additional burden of financing and governmental red tape) is a challenge to bold, decisive, imaginative production and management engineers. The prime manufacturer who makes final assembly must know the progress being made currently by each of his subcontractors and by each of his sub-subcontractors on down to the smallest unit that is working on a particular job. This knowledge is control. Without it, there can be no farming out because in most war material the ultimate product is made up of many pieces, and lack of a single part can make all the rest useless.

The side streets can help

There isn't time to convert all facilities or to get specially built machine tools. Farming out is the only answer. The better technically equipped subcontractor is already loaded down with all kinds of subcontracts. The cream of the subcontracting market has been fairly well drained. The job is a talent search, a search for men and machines with proper production guidance and managerial judgment.

The small machine shop, the alley garage, the metal stamping and working plants that now have idle machines must be utilized. Perhaps they can band together themselves on their own initiative. Perhaps they need help. More probably a prime contractor can band them together or one of their own number can gather them together into some form of pool.

In Connecticut a state-wide, industry-wide pool of clock makers has for more than a year been developing a large scale plan for manufacturing time fuses. In Canada, the paper and pulp industry is utilizing its maintenance shops on war work. These shops in normal times operate to maintain machines and equipment at the mills, but this requires only 48 hours a week, so that these valuable machine tools are free for 120 hours a week on a full 168 hour week basis.

In Australia a group of about 50 automobile repair shops, large and small, have banded together, under the general control of the Victorian Automobile Chamber of Commerce (and the special direction of one garage among their number which was best qualified to undertake it) to manufacture parts for Bren guns and other tools and munitions. Although these men have never worked on this type of production before, they turned out thousands of finished parts within seven weeks after the first government contract had been awarded and *rejection averaged less than one per cent.*

There lies opportunity

There are case histories in American production that show subcontracting as the cheapest and fastest way of building up production capacity without increasing the physical plant.

The Gisholt Machine Company in Madison, Wis., has been particularly successful in its subcontracting efforts. It has farmed out about 20 per cent of its work to some 50 subcontractors who employ as many as 500 men and as few as four. Gisholt has a subcontracting staff that does nothing but control the farming out work. Several expert trouble shooters are constantly on the road, going from subcontractor to subcontractor inspecting, expediting, searching for new subcontractors, and strengthening their connection with existing subcontractors.

The American Type Founders Corporation of Elizabeth, N. J., started in defense work with recoil mechanism for a 75-mm gun. Then they landed another contract for 37-mm tank guns. The company's machine tools were already loaded to capacity and tool builders could not promise delivery of new ones. The solution was to machine only the tubes, buy the forgings from which the tubes are machined, and subcontract all of the other 553 parts.

If Angastora's shop were in Germany, his tools would now be on a war job or he wouldn't have them. A year from now this country may be just as tough. But now we are depending on Angastora. If he employed a couple of hundred men, he would probably have a subcontracting department or at least a purchasing man to farm out work, a methods man to keep the shop at peak efficiency, a hard hitting sales manager, a fellow charged with checking waste and salvaging scrap.

He doesn't have these people, but in his town are men who know, or can learn, how to help him. With their help he, and thousands of others like him, can add their bit to our total production—maybe five per cent, maybe more. There lies an opportunity for those who want to help but have not yet found a way.

MANAGEMENT'S *Washington* LETTER

A last minute roundup by FREDERICK SHELTON, Washington observer of government and business

THE DEEP DISSATISFACTION now felt around the country is beginning to be felt in Washington. Officials here are getting jumpy. Nerves are taut; tempers are short. The situation is tense. Major policy changes are imminent—on war production and on war strategy.

> Congress is in ferment, wants to take a crack at somebody but doesn't know whom to crack. Certain boondogglings will have their appropriations cut. Total cut will not amount to much in relation to a budget of 59 billions, but the congressional mood means trouble for certain leftish social experimenters. Congress is not ready to buck the President on major issues, but is ready to assert itself on specific projects from time to time.

First, a few lines about the war. Then, a sweep-up of Washington maneuverings and internal policy trends.

A few days hence, perhaps by the time you read this, the supreme crisis of World War II will be on. By the end of May you probably will know whether (1) we will "win the war" in next 2 years, or (2) we will be in for a long war of attrition—5 years or more, with final success at the cost of a complete upset of our social and economic system.

THE WAR POLICY—THE NEXT MOVES? We Washington writers talk to dozens of men who know many angles of the war. We hear things that would make exciting reading. But we can't write all we hear, despite the sources. You understand why that is. We can give you some background, however.

The Pacific war TEMPORARILY is in a stalemate—meaning, of course, that we took the count on the first round, but will resume the fight later.

> War on Hitler seems to be the main aim now. How? When? Where? Answers are matters of high secret policy. But signs here indicate Roosevelt pressure on Churchill to get going—find a way to block the impending Nazi spring drive, stall the foe THIS year, smash him NEXT year.

Supply the many millions of Chinese and Russian fighting men, who need only the guns to fight with—this is the logic of the situation. This involves high diplomacy. It looks as if our government will press the issue of freedom for India and end of western exploitation in Asia.

U. S. aid in the East Indies was overpublicized, but reinforcements for Hawaii, MacArthur's forces in Australia, Alaska, and Aleutian Islands are being supplied rapidly—reserves for the next test in the Pacific.

> Russia is the main focal point. Our job is to back Stalin's army, keep airplanes, tanks and gasoline flowing to the Russian front. This is a matter of ships.

NEW AMERICAN-BRITISH FRONT, perhaps in N. Africa, to bolster the Russian effort —this is the inference to be gleaned from the military necessities and the movements publicly known to be taking

place. Successes DO seem likely.

One danger is that the hue-and-cry for offensive action NOW may force U. S. and Britain into rash, unsuccessful thrusts. But both the Roosevelt and Churchill governments MUST show a beginning of success by November. Otherwise Churchill would go out of office, and Roosevelt would lose his majority in the House.

Roosevelt could easily team up with the leftist Stafford Cripps if Cripps becomes British Prime Minister, but he prefers Churchill. His personal deals on lend-lease and U. S.-British free trade after the war were with Churchill. It would be embarrassing if a new head—Cripps, or, say, General Jan Smuts—came into power.

Russia is an enigma. Stalin has promised nothing except to oust the Germans from Russia. If, having done that by May or June, he decides to let the "capitalistic" nations finish their own fight, it would be a cataclysmic upset for the anti-Axis forces. This is something to think about—but not a present problem.

> The war crisis psychology, the get-going-in-1942 campaign, accounts for the almost frantic call for war production speedup now coming from Washington.

It also accounts for the eagerness to find scapegoats. Further shake-ups of the army and navy organizations from time to time are indicated. The war production set-up will be shifted when things go wrong. The pinch on business will be tightened, more and more sacrifices by investors and business managements will be demanded.

> But signs are that most New Deal "social gains" will continue to be protected almost "as usual". Congress would like to upset some "social gains" and will do so later, but just now the administration still holds the whip hand.

THE PRESIDENT is remarkably well, considering the strains. He needs a vacation, but balks on taking one, for he has to exhort everybody else to keep working, keep producing, keep fighting.

Roosevelt is running the war, the army and navy, and the civilian government as well. It's revealing, therefore, to know who are the people closest to the throne.

The President practically has three cabinets. The official Cabinet is less potent than the other two groups. Cabinet meetings are not major policy councils, but are mostly for chore assignments.

Heads of war agencies, Nelson, Hillman, Henderson, et al., manage most of the government business since government business is mostly war business.

The inner circle of White House intimates makes most of the basic policies, wangle appointments and oustings. Hopkins is the top man in the White House group. He's sick but still is the main access to the President. Judge Rosenman, Harold D. Smith and Wayne Coy have much say-so on departmental organization. Henderson, Currie, and Lubin are the economic planners. Henderson has become the second or third most powerful man in Washington. Even Nelson can't fly in the face of Henderson's policies. Justice Frankfurter (no longer buddy with Corcoran) is a close adviser. Others who plug in with all sorts of plans, ideas, and phrases for speeches are Lowell Mellett, Robert A. Sherwood, Archibald MacLeish. And Mrs. Roosevelt still calls the tune in various government agencies.

THE NEW DEALERS keep in the saddle. An able group of youngish career men is systematically attacking business groups which don't fall in step. It is hard to write about this in these days of war when unity is so essential, but the fact is that the New Dealers in power expect the opposition to do most of the "unifying."

The inside New Deal policy groups are persistently trying to "rumor" Secretaries Hull, Perkins, Stimson, Knox and Jones out of the Cabinet. Published predictions that these officials will quit in the near future probably should be discounted. Most of them seem to want to stick to their jobs, despite the rumors. Miss

Perkins is firmly backed by Mrs. Roosevelt. Hull's departure would embarrass Roosevelt. It would not be easy to find an acceptable successor to Jones.

> Next elections, November, 1942, are in nearly all minds in Washington. Political experts know that fast-moving events make present predictions almost worthless. But as of now most of them guess there will be a drastic upset in Congress, among both Democrats and Republicans, in the primaries starting in April and in the November elections. Some predict the Democrats will lose the House, but it's too early to take such predictions seriously.

Willkie's sponsorship of a Communist before the U. S. Supreme Court is being used against him in his 1944 campaign, even by some arch New Dealers.

HOW IS THE WAR PRODUCTION JOB GOING? Figures are not revealed, but it can be said that volume is rising steadily, that MOST war officials privately say the program is going well, and that by mid-year we will be turning out as much stuff as we will be able to transport to the various distant war fronts.

> Knudsen is being given much credit belatedly for having laid the groundwork for the production now rolling off the line.

Nelson is a bit jittery, however. He's the responsible head man, and frets if results are less than the maximum. He's under great strain; clashes frequently with colleagues; sometimes is accused of swell-head; but apparently he has the courage and energy to do what he thinks needs to be done.

Merchant ships are the most critical bottleneck. They will be pouring off the ways by June—new bottoms to carry war stuff to the fighting fronts at a rate in excess of sinkings—but just now there's pressure to speed up ship-building.

Stevedores, and dock facilities are a problem, both here and at distant ports.

ON RUBBER, Jesse Jones is being made the official goat. Whole government had assumed continued access to East Indies rubber. Now Jones keeps mum, prods his synthetic rubber manufacturers, probably will surprise his critics with progress made a year hence. Main pinch will be due to rubber supplied to our British and Russian colleagues. And we're sending tires to our Latin-American "good neighbors": some of which tires are said to be trickling back here for sale at smugglers' prices. I'll venture the prediction that some sort of makeshift tires will be on the market a year hence.

> Labor policy will soon be clarified. It will NOT be anti-union. The administration probably will get AFL and CIO leaders to agree "in principle" on some not-too-rigid "ceiling" for wages, giving labor leaders credit for agreeing to make war sacrifices. But still wages will be allowed to creep up.

Closed shop will not be officially authorized, but its near-kin, maintenance-of-union-membership, probably will be the practical result in most cases.

WPB plan for joint management-labor conferences will not satisfy the Reutherites, who want real power in management. War pressures will force the administration to be a bit less tender toward unions, but fact is that without union support the administration would lose the next election.



MOBILIZATION OF THE OLDSTERS, 45 to 64: Plan is to move cautiously on this. But before the year is out Government will be telling lots of civilians what kind of jobs they should work at. Not actual draft, probably, but some coercion, through the U. S. Employment Service offices under McNutt.

If you want to "get into the army" but are too old, too fat, or out of training, you might enlist with Dwight Davis, Coolidge's Secretary of War, now heading a "specialists corps" in the War Department. It's a chance for business men who can help in administrative jobs—a special uniform but no regular army commission. Plans are still in embryo, so don't write Davis until late April or May. (There are 35,000 applicants already.)

> Total industrial production (mostly for war) is headed toward much higher levels. Government analysts foresee volume of DOUBLE the 1935-39 average—expect this peak in 1943-44. This would be a further rise of 20 per cent above early 1942 production.

LOWER STANDARD OF LIVING for most Nation's Business readers, however, since taxes will take your "extra" earnings, and most luxuries will not be available.

Trouble is the government itself does NOT retrench. Visitors to Washington are shocked by the "government-as-usual" atmosphere here.

Inflation pressure is rising steadily. Officials foresee increase in average prices of about 15 per cent for the year ahead, but fear a much sharper rise in 1943-44. Rough consensus is that 1939 prices will more than double before the war phase is past (then fall!).

Here's the problem: Government plans to spend 59 billions next fiscal year, get about 27 billions in taxes. The public will draw on income and savings for about 10 to 12 billions of defense bonds. That means over 20 billions would still have to be raised through inflationary bond sales to commercial banks, making that much new money for somebody to spend—"hot money."

> One new anti-inflation move probably will be the offering by the Treasury of a more attractive type of bond—kind that insurance companies and savings banks would go for. Several billions more of the new hot money could be absorbed by such bond sales.

So, price ceilings and rationing will have to be applied in much stronger doses. More and more commodities and businesses will feel the fist of Henderson of OPA.

Even so there will be lots of money-in-pocket that will find outlets—in land, real estate, entertainment, liquor, and possibly at some later date (not now) in the speculative markets (stocks and commodities).

Public debt is headed for 130 billions—by late 1943.

James Landis, head of Civilian Defense, is on probation with congressional critics. He lopped off some of Mrs. Roosevelt's "frills," but is not likely to make OCD strictly a home defense project.

Archibald MacLeish got off to a bad start with his big-staffed Office of Facts and Figures—big official publicity build-up. Now he's having trouble finding a place to fit into the Washington war machinery.

Barney Baruch, veteran World War I price controller, spends much time in Washington, staffs with Nelson and Henderson, but laments that half-way measures are brewing bad trouble for the future.

Money in circulation—currency—"folding money"—is mounting rapidly. Now nearly 12 billion—was about 8 billion at beginning of 1941. Volume of $1,000 bills outstanding is rising rapidly. Hoarding? Or tax evasion?

Farmer-labor politics: Irked by the American Farm Bureau's denouncement of the Farm Security Administration, Washington New Dealers got Phil Murray, CIO, to lobby for the FSA appropriations. Result was even more cuts by Congress.

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FIGURING, ACCOUNTING AND STATISTICAL MACHINES SPEED WAR WORK

Who'll Tend Your Shop Tomorrow?

By R. L. VAN BOSKIRK

THE Government plans to call millions for war work, cutting the present labor pool, supplying civilian needs, by one-half



O. E. M. PHOTO BY HOLLEM

This 78 year old skilled operator is among the advance guard of retired workers who have returned for the duration

A SMALL manufacturer of berry boxes in Alabama employed 18 workers. Since June, 1941, he has lost 12 of them—three to the Army and Navy; four to an ammunition loading factory; two to a steel plant; one to a paper mill; one to a construction crew. One became a bus driver in a nearby defense center.

The manufacturer wrote his association representative in Washington:

"What are we going to do for labor?"

The representative scurried around to find an answer. There wasn't any. No one can tell just where that manufacturer will get his labor supply. When asked why he didn't use women, the manufacturer retorted:

"I do. Four of those I lost were women. In fact, they leave me faster than men because I can't pay those big defense plant wages."

Berry boxes are important. How can strawberries be moved without them?

"Yeah, they're important," said the association man, "but machine guns are *more* important."

In that answer is the nub of the problem.

Just how serious is the problem?

Here are some figures. Between 30,000,000 and 35,000,000 persons will be needed for direct participation in the next two years' war effort, aside from agriculture. Of this number, about 25,000,000 will be needed in war industries if present production schedules are followed. At present only 10,000,000, including those in the armed forces, are in their war-time niche.

A tremendous job of juggling labor to get maximum production and fighting power is imminent. How are farmers going to increase production if their man power is depleted? What is a baker in Oskaloosa; a storekeeper in Ocala; a banker in Oshkosh; a jewelry manufacturer in New England going to do for help? Will he have to change his own occupation?

The supply of labor

THE problem is difficult to solve but not impossible. According to the census, there are only 30,000,000 men in this country between the ages of 20 and 50. But there is an immense labor reservoir made up of older and younger people, and women. In 1929, at a peak production point, more than 50,000,000, including farm people, were gainfully employed. Alvin Hansen, economist for the National Resources Planning Board, says that we may reasonably expect to have 56,000,000 by the end of 1944. Today's problem is to use that reservoir most advantageously. It takes time to shift workers from carpentering to shipbuilding—from measuring ribbon behind a counter to measuring powder for a cartridge.

First thing management faces is to find out how many present workers should be retained. It makes no difference whether your plant is making war materials or not. Key men without dependents may not be deferred except under unusual circumstances. Deferment in the past does not guarantee deferment in the future. Pearl Harbor and Singapore made a new shuffle mandatory. Reclassification will put many a man in the army who may have thought himself immune from the five

How persistent should a life insurance agent be?



IN 1882

"HOW PERSISTENT should I be?" is a question that plagues every conscientious life insurance agent.

Years ago, it was much harder to answer that question than it is today, for the agent's efforts to sell life insurance met with more resistance. Even now, however, it remains a problem.

▶For example, perhaps an agent is trying to sell a policy to a man who has a wife and two children but little or no life insurance. He isn't much interested. The agent visits him several times, but each time he says, "No!"

Should the agent cross this head of a family off his list? Should he give up trying to persuade him that his family needs some life insurance? Or should he call again?

▶If the agent does try again, this man whose family really *needs* protection might say, "Tell that agent I don't want to see him again. I'm not interested... he's wasting his time!" On the other hand, the next call might be the time when he would say, "Yes."

▶Suppose the agent makes that next call—and receives the answer, "Yes." Then suppose something happens. The family of this new policyholder will not be left without funds and the widow will not have to depend on relief or relatives, or go to work, or take the children out of school.

Many seasoned life insurance agents have had such an experience—and it is a lesson they never forget. It explains why conscientious agents, like crusaders in every good cause, are loath to take "No" for an answer. It explains, too, why many Americans have the life insurance they now own; some agent, through repeated calls, helped them to buy the kind and amount of life insurance they should have.

▶Every life insurance agent knows that there is one group of people who never criticize an agent for being too persistent. They are the beneficiaries of the men who finally said, "Yes."

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This is Number 48 in a series of advertisements designed to give the public a clearer understanding of how a life insurance company operates. Copies of preceding advertisements in this series will be mailed upon request.

Metropolitan Life Insurance Company

(*A MUTUAL COMPANY*)

Frederick H. Ecker, CHAIRMAN OF THE BOARD — *Leroy A. Lincoln*, PRESIDENT

1 MADISON AVENUE, NEW YORK, N. Y.

IN 1942



AN ADVANCE PROOF of this article fell into the hands of an office visitor who employs hundreds of workers. When through reading he startled the editor with this exclamation: "We are already training 75 new workers. I am going right back home and double that number."

We hope it will cause a similar reaction to other employers. Time is short. The need is great. Bakers, jewelers, storekeepers and all other followers of normal pursuits should prepare to replace an employee who is certain to be called for war work. Substitutes must be found among handicapped men, older and younger workers and women. Scouting and training now is both personal and national preparedness

a.m. blast of a bugle. If you are *not* making war materials it is a cinch that some of your men are going to be working for someone who *is* making them before this war is over. Even bank clerks, store clerks, waiters, barbers and others will transfer to war production. Dependent relatives do not keep a barber or a bookkeeper who can handle a tool or a time sheet from transferring to a munitions plant where wages are higher.

No hard and fast rule on essential industries or indispensable workers has been evolved as yet. Common sense tells us that such things as planes, ships, guns and tanks are essential; that food and fuel are necessary; that newspapers, magazines, radio and entertainment are desirable. Everyone knows that experienced chemists, molders, pattern makers, tool or die makers working on war materials are often irreplaceable. The Selective Service Board's point of view is that men will be taken according to the need with due allowance for irreplaceable production skill. No war can be won if the able-bodied man power is left at home.

The need *is* great. Prudent men will prepare themselves to accept the shock of more Singapores before the tide begins to turn in favor of the United Nations. They will train older men, men with unquestionable dependents, men physically disqualified for army service, and women workers, to take the place of military eligibles.

The definition of a key man is complex and variable. Theoretically he is a necessary man who cannot be replaced within a reasonable time. An almost open and shut case is that of an experienced molder or pattern maker in a defense plant. It would take from five to eight years to train a substitute. His loss would impair plant production. Such a man should be frozen on the job.

But there must be a certainty that no one can be trained to replace him and that he is being used exclusively for his particular skill. To cite an extreme case; a pattern maker shouldn't be expected to spend half his time running an elevator—some one else can be trained for the elevator job.

The lessons of the last war have not been forgotten. It is to be hoped that there will be no more unfortunate "dugout" cases in this one. Just because a man works in a shipyard is no reason for deferment. It must be proven that no one can be trained to take his place in a reasonable length of time.



O. E. M. PHOTO BY HOLLEM

Women frequently have talents that are highly adaptable for precision work. This girl turned from razor blades to tool parts with amazing dexterity.



IT'S ON TWO SHIFTS FOR VICTORY!

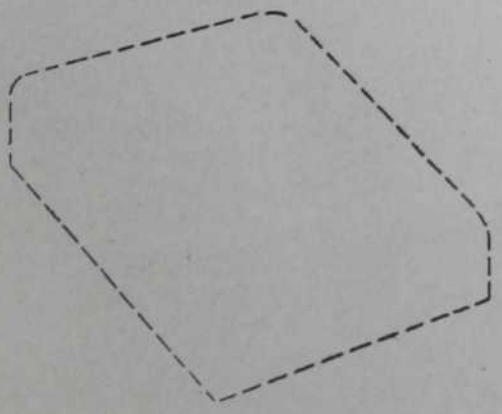
The old white collar, she ain't what she usta be.

For so acute are today's production problems — in the office, as well as in the factory — that many concerns employ multiple shifts of clerical help . . . so that figure-work machines shall not stand idle while machine tools hum a victory tune!

Thus Management's battle against time throws new emphasis on the amazing *speed* of Comptometer adding-calculating machines, and the time-saving *efficiency* of modern Comptometer methods (particularly in figuring *costs and payrolls*).

In the light of these new conditions, you may wish to consult your local Comptometer Co. representative. He is prepared to suggest ways in which your present Comptometer equipment can be better adapted to meet your new problems.

Telephone him . . . or write to Felt & Tarrant Mfg. Co., 1712 N. Paulina St., Chicago, Ill.

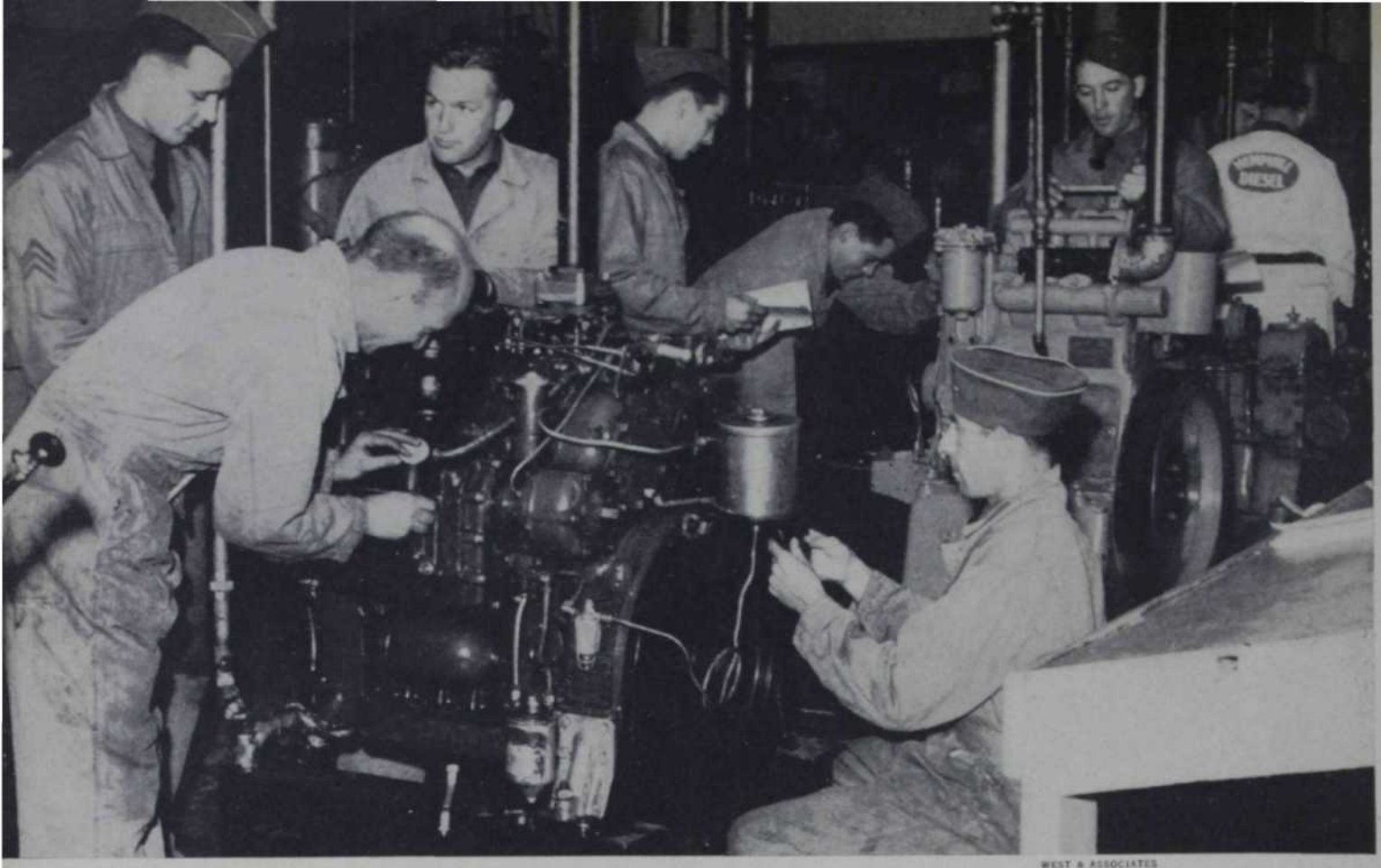


COMPTOMETER

REG. U. S. PAT. OFF.

ADDING-CALCULATING MACHINES and METHODS

This is where we'd ordinarily put a picture of the Model M Comptometer. Because these extraordinary times emphasize the importance of COMPTOMETER METHODS *so strongly, we've omitted the machine in an effort to call your attention to that emphasis!*



WEST & ASSOCIATES

The army wants the same type men who are often most valuable to business—skilled mechanics who can perform miracle operations on wounded planes and tanks may be the difference between victory and defeat

A critical occupation is almost as difficult to define as a key man. An able seaman on a tanker carrying gasoline to Iceland is probably more valuable there than he would be in the army—or anywhere else. But it is conceivable that a man sweeping floors in a machine gun plant would be more eligible for the draft than a buyer in a department store if the latter's going might wreck his firm's organization. Location, too, is important. A railroad fireman might be deferred in Kansas City if there was a shortage in that city, but not in Dallas if there were plenty of firemen to handle the situation there.

A larger army possible

ALL of these things, and dependency, too, depend upon the state of the nation. No one wants to build an army bigger than we can supply. But if the Pacific fleet should be wiped out—if Alaska should fall—if several of many other possible disasters should occur—the need for a bigger armed force would be obvious. It is incorrect to say that a man may be deferred regardless of circumstances. When the enemy is at the gate every man who can hold a rifle may be pressed into service.

Employers have a patriotic duty to perform in helping to make these adjustments. They are the best judges as to whether or not a man is indispensable to their own business. Responsibility should not be turned over entirely to personnel men or foremen. If the business is essential to the war effort, it is in the national interest to see that production is undisturbed. It is the employer's duty to ask for deferment of men whose loss would impair production. But, with this qualification:

The employer must be sure that no one else can be trained to replace the selectee.

The Local Board may not ask whether you can do without him, but, "How long will it take to train a man to replace him?" The employer should be intelligently prepared to state his case and ask for deferment if his conscience so dictates. Blanket requests for deferment are in bad taste and will inevitably backfire. Each case should be studied on its individual merits.

Don't forget the army needs skilled men, too. Winston Churchill reported that German mechanics repaired captured British tanks and used them against their former owners in a few weeks' time. Skilled mechanics are just as necessary to an army as trained pilots are to an air force.

When employers interview their employees about dependents it might be well to know that any man who has been married since Pearl Harbor is definitely on the spot. Those married before September 16, 1940, are comparatively safe from the draft unless their only dependent is a working wife or is otherwise independent. Anyone married between those dates will need "unusual circumstances" before he is excused. Minor physical defects such as bad teeth will no longer bring deferment. Today, every man up to 45 is a prospect for a service uniform until the local board acts on his case.

War plants will need workers

THE trek to camp, shipyard and arsenal began months ago, but it was a trickle compared to the exodus that will be under way this summer. And, big as the march to camp may be, it will be dwarfed by the hegira to plants making war materials. An inkling of what is involved may be taken from General Motor's President Wilson who announced that his company would employ 342,000 in 1943 or 107,000 more than any time in history. It is obvious that white collar workers are changing to blue shirts and overalls. Women and girls are going from behind the counter to behind an assembly belt. Not only sons, but fathers, daughters and wives have joined the Big Parade.

Of the 10,500,000 more war production workers needed by the end of 1942 alone, it is estimated that 7,500,000 will be shifted from so-called non-essential industries. The 3,000,000 others will come from 300,000 or 400,000 farm

(Continued on page 70)



Western Electric *. . . is back of your Bell Telephone service*

"—And Become Citizens"

By SAMUEL B. PETTENGILL
Former member of Congress from Indiana

IF YOU intend to do any beefing in the next two years, do it now. In 1942. This spring. Next November. This may be your last good chance to beef. This year we elect a Congress.

In short, we elect a Board of Directors of the American people. A Board that votes on almost every matter that concerns you—whether you vote or not—a Board that sits in the board room of every insurance company, savings bank, store, farmers' cooperative, big steel, little steel, every railroad, labor union, mine, factory, saw mill, quarry, ranch, salmon run, newspaper.

A Board that sits in the office of every lawyer, doctor, dentist, architect, engineer, teacher, clergyman, college president. A Board that taxes every purse, every endowment, every trust fund; that largely determines the standard of living of every citizen and of every institution in the greatest nation in the world.

A Board that declares war. A Board that puts your son in uniform and sends him to far places whence he will return "with his shield or upon it."

You fathers and mothers of sons, do you want that boy of yours to have every chance to come striding home safe and sound? Do you want him given the best weapons that brain and hand can make without delay? If you do, your Congressman will vote on that question.

We are at war, perhaps the grimmest we have seen since Valley Forge. The war will mean little, nothing perhaps, unless we prove to the world, and establish the fact for all future generations to read, that a free people can defend freedom against total assault without losing it in the struggle to save it.

Will that fact be written on the page of history? Your Senator will write it, or it may not be written.

Can we vest in the Executive almost total military and economic power for total war and then restore that power to a free people as Cincinnatus returned to the plow and Washington returned to Mount Vernon? Your Congressman will decide.

Will we emerge from this conflict a Fascist State, a Communist State, or the United States? Your Senator will decide.

Will your hard-won savings from years of toil be washed out in your old age by inflation or repudiation? That is up to your Congressman.

Will your millions of young men, home from the war, be frozen out of jobs by a closed shop labor monopoly, established while they were "on the frontiers of freedom"? Your Senator will decide.

These and dozens of other questions equally important are going to be decided in Board Meeting, in Washington, D. C., U.S.A., this year, next year.

You, Mr. Baker, Candlestick Maker, Housewife, Farmer, and all the rest, are the stockholders of U.S.A., Inc. You can't attend Board Meetings in Washington. There are too many of you. There is no Town Hall big enough. But, you are not voiceless. The Constitution has assured you the right to elect representatives or directors to speak and vote for you.

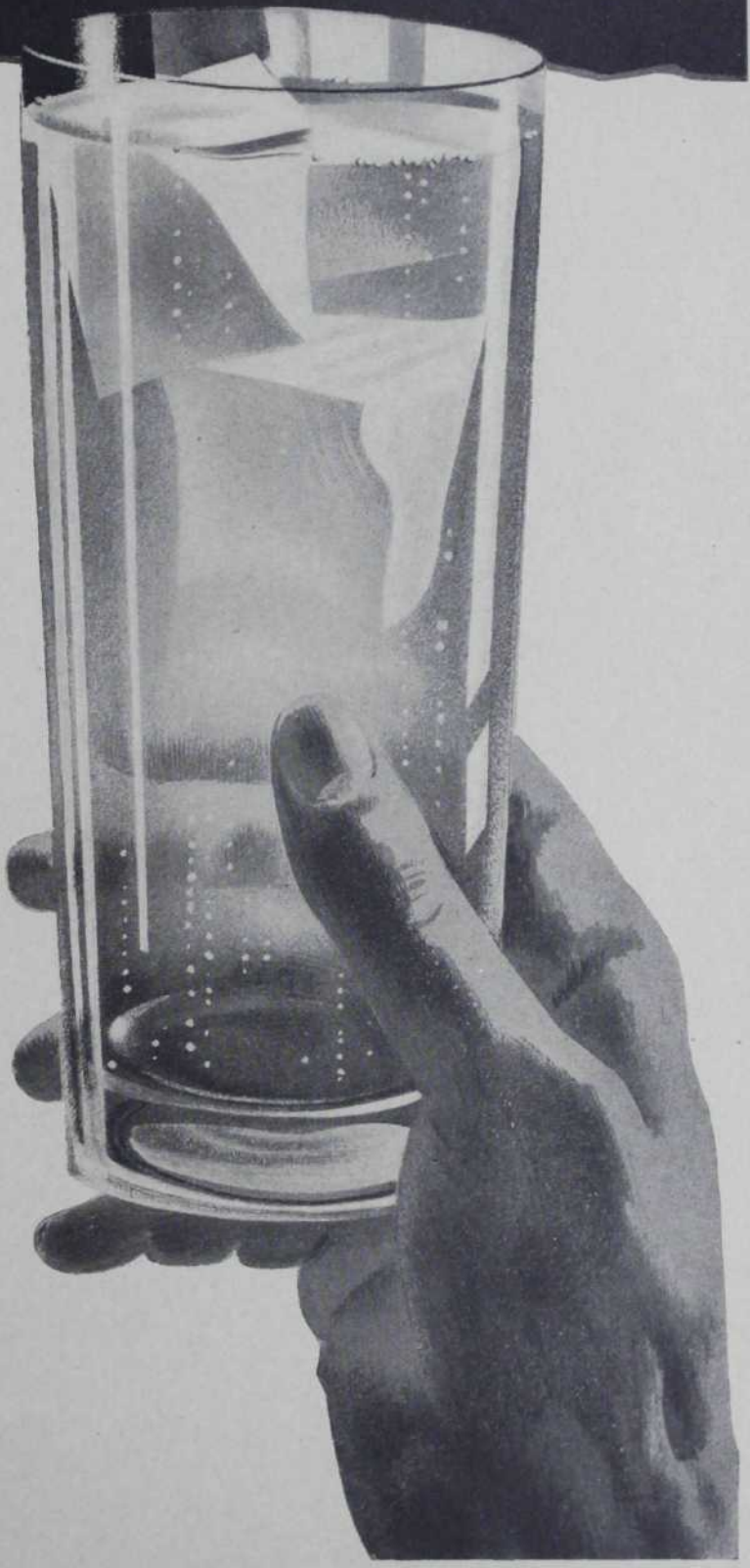
How do you want them to vote? And

(Continued on page 78)

So long as the people keep the power to elect Congress, you can have the kind of government you want



The 70 million dollar Highball



Please don't be alarmed, good reader! No genial barman is going to hand you a chit for $70,000,000 next time you order a Calvert and soda.

Yet it *has* taken Calvert's $70,000,000 of invested resources to insure that glorious taste you find in your Calvert highball.

Your bookkeeper friends might think we are talking about cold, physical assets alone. Not so. Although it is true that Calvert's vast distilleries are the largest and most modern in the world.

But, more precious still, are Calvert's *human* assets: its many hearts, heads and hands that are raising the ideals and standards of fine whiskey making!

With a great library of 253 magnificent types of whiskies and spirits to choose from, Calvert's blending scientists patiently search out those types that belong together – and blend them in a perfect harmony of flavor, smoothness and delicate bouquet.

For only when they have achieved a happy blending of every desirable whiskey quality are Calvert men content to bottle the result under the honored Calvert name.

$70,000,000? Sure, that's a lot of money!

But we believe it's worth mobilizing every dollar of our vast resources to produce a product which—year after year—continues to hold its top position as America's favorite luxury whiskey.*

Calvert

The Institute of Blends

Calvert Distillers Corp., N. Y. C. BLENDED WHISKEY 86.8 Proof. *Calvert "Special": The straight whiskies in this product are 4 years or more old. 27½% straight whiskies, 72½% grain neutral spirits. Calvert "Reserve": The straight whiskies in this product are 5 years or more old. 35% straight whiskies, 65% grain neutral spirits.

Making Our Ships Work Harder

By HERBERT COREY



H. ARMSTRONG ROBERTS

OUTLINE of a war-winning measure that will cost nobody anything except a little time and trouble; which, if not taken, may cost thousands of lives

THIS will be an article about confusion. It will follow no ordained pattern because the material is necessarily disorderly. It will show one aspect of our sea-shipping business that is interfering seriously with the prosecution of the war against Japan and Germany. No attempt will be made to fasten the blame on any one, least of all on the U. S. Maritime Commission, which is doing the best it can.

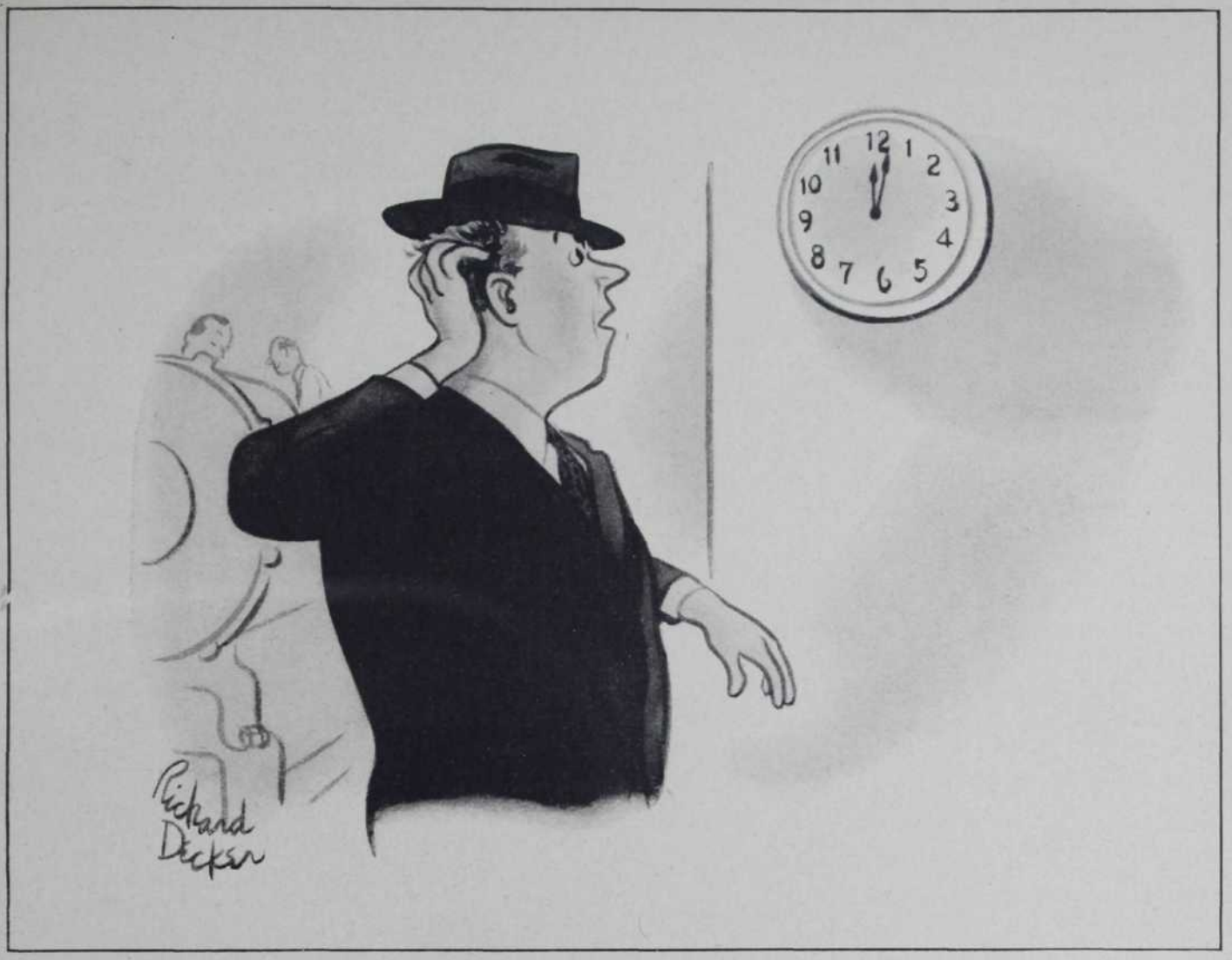
The purpose is to reveal a condition that can be corrected. Correction is perhaps the only item in the war program that would not cost the taxpayer a dime. The one thing needed is capable administration under a one-man boss, rather than under a Committee or an Authority. One competent man, armed with knowledge and authority, and willing to bear down when necessary, could restore order.

Freight is piling up on the docks. Not on all docks. On too many docks. Ships are being badly mismanaged. Not all ships. Too many ships. Cargoes are being badly routed. Not all cargoes. Some cargoes. Union labor is imposing obedience to its rules on all docks. Hours and days are being lost. Crews are jumping ship. Not many crews and few men. Too many.

Shipbuilding is not progressing as it should. That statement suggests the opening of a criticism of the U. S. Maritime Commission. Wrong. The Maritime Commission wanted to build 50 ships in 1937. It encountered a profound disinterest. Still, it did build 50 ships. That program has been doubled and added to ever since then. Now it hopes to build 800 ships in 1942. If it succeeds, it will have passed a miracle. The Commission, in July of 1941, was promised the steel it needed. It has gotten steel, but not all the steel it needs.

A modern cargo ship should be driven by turbines. The Navy got the turbines. This is as it should be. But the cargo ships had to put up with old-style reciprocating engines. New shipyards were opened. Old shipyards given life again. But there is a shortage of labor.

Sidney Hillman, labor master in the War Production Board, will say—has



THE FOREMAN WHO COULDN'T TELL TIME

THE foreman was in a quandary. He'd just been transferred from the day shift to the night shift, and for a minute he didn't know whether it was noon or midnight. The clock couldn't tell him, of course. But the point is, neither could the light!

Daylight 24 hours a day

Since the plant installed G-E fluorescent lighting, the night shift had been turning out as much as the day shift. And no wonder. This new "indoor daylight" actually lets workers see *faster, more easily*, conserving energy formerly lost under poor seeing conditions.

300,000,000 extra man-hours

In drafting rooms, in machine shops where tolerances run to the thousandth of an inch, men are working longer hours with less fatigue. "25% fewer rejects," says one shop. "Less time-out for relaxation," says a machine tool maker. "Typing speeded up 20%," says an office.

Experts estimate that if G-E fluorescent lighting were installed overnight in all American war plants, and production increased as little as 3% (a conservative estimate), it would add 300,000,000 extra man-hours—enough to build 12,000 planes! Or 11 battleships. Or 100 destroyers!

What to do about it

If you're running a war industry, you can have G-E fluorescent lighting—and have it quick! Ask your local G-E office about this cool, super-efficient lighting today!

If you do war work at home, your eyes need protection too. Make sure you don't read or sew without the right size G-E bulb in your reading lamp. See the Right Size Bulb Chart at your G-E MAZDA lamp dealer!

Whichever you buy—G-E MAZDA lamps for the home or G-E MAZDA F *fluorescent* lamps for your business, look for the G-E monogram. It *means full light for current consumed!*

G-E MAZDA LAMPS

GENERAL ELECTRIC

MAZDA: Not the name of a thing, but the mark of a research service

said—that there is plenty of labor. Wrong. There are plenty of men but not plenty of shipbuilders. Shipbuilding is a trade of skills. In one shipyard 14,000 men are employed. Of the 14,000 some 745 are shipbuilders by profession. Admit that the unskilled men who are helping to build ships are proving unexpectedly competent. They still lack skill.

Meanwhile the need for ships is—doubling? Certainly. Quadrupling? Perhaps. Ships are the life of our war effort. We have pooled goods, money, men and promises with Great Britain. If we had more ships—plenty of ships—the British people could have one egg a day instead of four a month; we could get planes and guns and shells to Australia; we could relieve the Philippines; we could put an armed force into Libya and Murmansk and Irak and Egypt. We could back up the British until they could take a chance on invading the continent and relieving the pressure on Russia. That would disabuse the Japanese mind of any idea that Russia can be safely tackled. We could take that string of Japanese-held islands in the Pacific and light with flares the way into Tokio and Nagasaki.

Ships are invaluable

IF we had plenty of ships, perhaps hundreds of thousands of American lives might be saved. The value of a ship today is not measured in dollars. Ship prices are fixed in days and delivered cargoes. America can produce all the things needed for winning the war.

American industry has been cuffed around by do-gooders and abused by politicians. But it is producing magnificently. The men who are really making good in production for war are the business men, the managers of the production job.

But we must have ships to take the things they produce where they are needed.

If the things that are wrong now on the docks and on the ships were corrected, the equivalent of 100 ships would be added to our cargo fleet. They should average four to five round trips a year, one ship with another. Four or five hundred more cargoes than we are now delivering would not be enough but they would help.

Let's look at the facts.

A ship is merely a floating warehouse. It is loaded at one port, pushed across the sea, and unloaded at another. If voyaging alone it may be delayed by storm and other incidents. If in a convoy its speed must be held down to that of the slowest vessel in the fleet. Time can only be saved at the two ports. When conditions are ideal, a ship is tied up at her berth within the hour of arrival, day or night. The port authorities have been advised of her arrival by radio and a berth is open for her.

The port authorities have notified the boss stevedore. As many longshoremen as can be efficiently worked have been gathered in a "shape" on the dock. The hatches are snatched off and the longshoremen rip the cargo out. The men of the crew clean ship and take on fresh stores. Not a moment is lost—if conditions are ideal.

Sometimes cargo is thumping into an emptied hold while goods are being taken out of the others. Tankers haul alongside and oil is pumped into the fuel tanks. The captain is on the bridge and the mates are ordering the lines cast off while the last hatches are being battened down. Tugs push the ship into the channel and she's away.

The boss stevedore has so loaded the ship that she is trimmed to the captain's liking for seaworthiness and fuel economy. The longshoremen have wedged and braced the cargo so it will not shift. If the ship is to be one of a convoy, she is anchored in the roads to await her mates. The convoy is held up until the last ship to be loaded reports.

Slowness is too costly

SLOW action in a single port and a single ship may hold up a convoy, for one, two, sometimes even three or four weeks. Now we've reached the heart of this story. The convoy may include as many as 100 ships. Two days' time wasted by the last ship means 200 ship days lost. That might mean the loss of a battle. American planes reached Liverpool in a slow convoy. It was necessary to make certain changes to adapt them to war demands. The needed parts were sent over on another slow convoy. It was the best that could be done. Yet it is conceivable that six weeks was lost, at a time when Britain was being bombed every night and was in desperate need of planes to fight back.

(Continued on page 81)



ELIZABETH R. HIBBS

Although speed is essential, the union at Boston decreed that a sling could carry only 1,800 pounds. Elsewhere the limit is 2,500 pounds

Wake Up, America ...It's Late!

An Editorial from the New York World-Telegram
March 5, 1942

THE nation needs to awaken to the full gravity of the peril that confronts it.

It needs to appreciate how badly we have been defeated in three months of war.

It needs to understand that it is possible for the United Nations and the United States to lose this war and suffer the fate of France—and that this possibility may become a probability if the present tide does not change.

It needs to realize that there is grave chance of the Japanese pushing through India and the Germans driving through the Near East, to join their armies and resources in an almost unbeatable combination.

It needs to get away, once and for all, from the comforting feeling that while we may lose at the start we are bound to win in the end.

Only when fully aware of existing perils will the United States do its utmost. Pray God that awareness will not come too late, as it did in France!

Production Director Donald Nelson appeals for vastly increased industrial output on a 24-hour, seven-day basis—168 hours a week. Maximum production, in short.

Can we get it?

Not on the present basis—not under the psychology of recent years.

Not until we quit thinking in terms of less work for more money.

Not while there is greater concern about overtime pay than overtime production.

Not while farmer politicians are more interested in higher prices than raising more essentials.

Not while government bureaus—created to meet a depression emergency that is ended—continue to grab for themselves money needed for armaments.

Not while an army of federal press agents clamors to promote and perpetuate activities that have no present need or value.

Not while Congressmen try to put over useless canals and river schemes and take up the time of defense officials clamoring for factories and contracts as if war were a great gravy train.

Not while WPA, despite a shortage of labor, seeks to carry on projects which it doesn't have the men to perform or the need for performing.

Not while CCC and NYA stretch greedy hands for funds to pamper young men who ought to be in the armed forces or the war plants.

Not while strikes hamper war production, despite a solemn promise that they would stop.

Not while the life-and-death need for uninterrupted production is used as a weapon to put over the closed shop.

Not while double time is demanded for Sunday work which is only part of a 40-hour week.

Not while a man can't be employed on an army project or in a war plant until he pays $20 to $50 or more to a labor racketeer.

Not while criminal gangs control employment and allocation of men to work on the Normandie and the other ships along New York's vast waterfront.

Not while fifth columnists are pampered and enemy aliens move freely in defense areas.

Not while the grim job of preparing our home communities against air raids and sabotage is gummed up with a lot of high-falutin', boon-doggling social service activity.

Not while pressure blocs clamor for higher benefits, bounties and pensions.

We will not get maximum production, in short, unless, first, we fully realize our awful peril; and, second, get over the gimmes of recent years.

Gimme shorter hours, gimme higher wages, gimme bigger profits, gimme more overtime, gimme less work, gimme more pensions, gimme greater crop benefits, gimme more appropriations and patronage, gimme plants for my Congressional district, gimme fees and dues to work for Uncle Sam, gimme ham 'n' eggs, gimme share-the-wealth, gimme $30 every Thursday.

France had the gimmes, too—had them till the Germans were close to Paris. Then everybody went frantically to work—too late.

France has no gimmes today—except gimme food for my baby, gimme a place to lay my head, gimme death.

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ACME

It may not be too much to hope that the workers will see that collective bludgeoning is not in their own interest and can never succeed

Wanted: A Labor Policy

By FRED DeARMOND

THE STRESS of war has demonstrated the fallacy of "each case on its own merits" in labor disputes. Design of political expediency should be renounced for a return to first principles

TWO FACTS about the labor situation are now beyond dispute.

One is that more "steps are being taken" than ever before. The other is that no one is pleased with the results being accomplished.

But agreement goes no further than this. Beyond these two axioms there is only controversy and mutterings of irreconcilable differences of opinion. We see their manifestation in the disquieting statistics on strikes. Seventy-six strikes in war industries in February caused a loss of more than 2,000,000 man hours—206 per cent over January. More than 1,000 cases—an all-time high—were said to have been pending before the Labor Department's Conciliation Service.

There is no lack of machinery for handling labor relations. It was never before so elaborate or so ineffectual. Conciliators, "impartial chairmen," trial examiners, wage and hour inspectors, civil liberties investigators, union "industry councillors," mediators, umpires and the like go in swarms. Employers have their personnel relations managers and industrial relations counsel. States as well as the nation boast their "little Wagner Acts." City governments name arbitration boards from among their best minds.

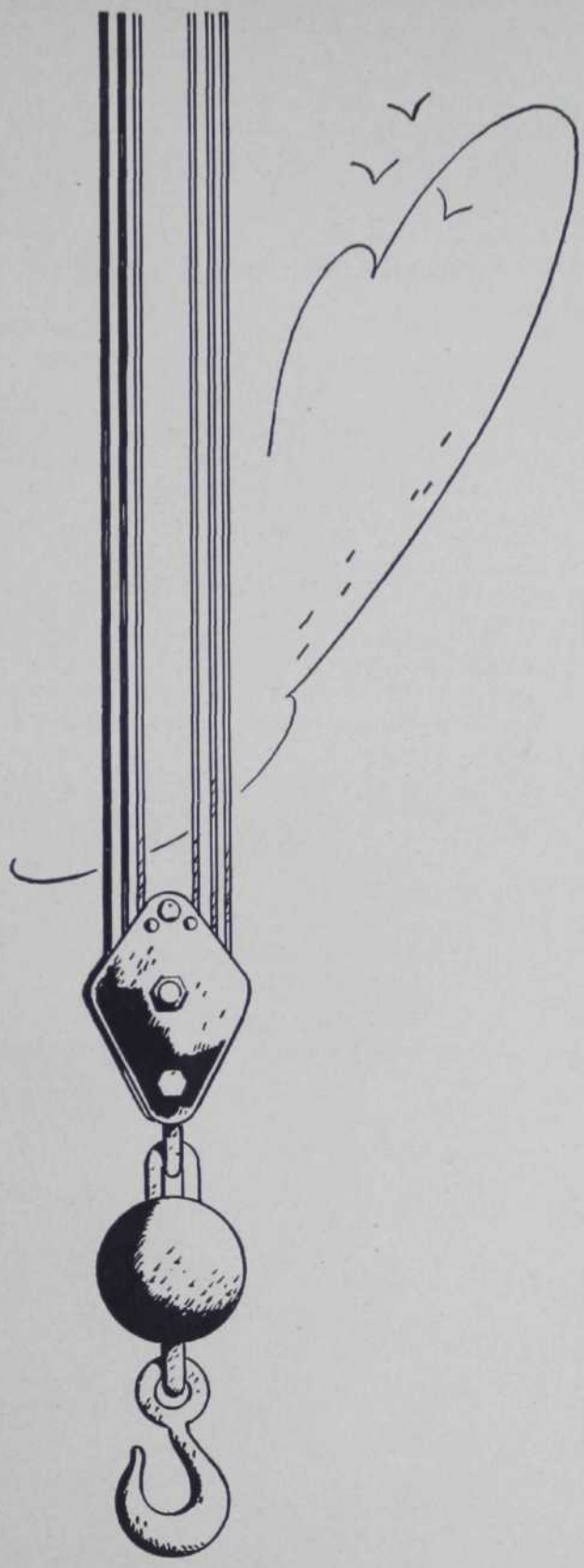
In spite of the efforts of all these earnest men and women, supported by a deluge of oratory and written words preaching cooperation and sweet reasonableness, brute force is still the court of last resort in labor disputes. And to this court labor leaders take appeals in an appalling percentage of cases.

The amazing fact about the continuance of this strife, even in war-time, is that most objective minds are agreed on its cause, yet have been unable to do anything about it. The trouble is twofold:

1. Internal conflicts within labor's ranks.
2. Confusion and lack of policy among government agencies.

IMAGINEERING

IS A KIND OF SKY-HOOK



All the tools America has, all we can contrive, are pre-empted for the job at hand.

While every hand is busy with production, our vision may properly be lifted beyond the horizon to meet the challenge of the future.

Imagineering is a word for it, a sky-hook to lift our thinking, a formula for helping to decide where we go from here.

Imagineering is looking at the things you used to make, and deciding that if you don't make a prime job of finding out how to make them immeasurably better, you may never be asked by your customers to make them again.

Let your imagination soar, then engineer it down to earth. Forget your old assumptions. Bury your old prejudices. Look at all the developments that are coming out of a thousand research laboratories. Invite suggestions.

For there are millions of new jobs to be made when this war is over. They are your responsibility, and ours.

Now is the time to do the Imagineering which will make those jobs. Perhaps you would like to have us help you explore the possibilities of Alcoa Aluminum.

ALUMINUM COMPANY OF AMERICA, 2125 Gulf Building, Pittsburgh, Pennsylvania.

ALCOA ALUMINUM

ALCOA REG. T. M.

★

Two militant union federations, A.F. of L. and C.I.O., are shooting wildly at each other and hitting innocent spectators. We see the common spectacle of business establishments being picketed and heads cracked by one union because the management will not repudiate a contract made with another union.

Unions fight each other

C.I.O. men refuse to handle parts made in another plant by A.F. of L. men, as in the Spicer "secondary boycott" strike. Workers who have carried union cards for years are forced out of jobs because they won't change their allegiance.

Even within the same federation, the old jurisdictional controversies still flare up frequently. Only recently a stubborn quarrel between two A.F. of L. unions kept the Muskegon, Mich., plant of the Anaconda Copper Company closed down for months and its 700 men idle while an important job of making wire for electric motors was suspended. No difference existed between company and men. For one reason or another, not one of the great system of federal agencies for smoothing out labor relations would touch the Muskegon strike.

Still more bitter and unrelenting are the wars of the big federations against independent unions not affiliated with either and against all those workers who do not choose to belong to any union. These two groups of dissenters together constitute about four-fifths of all who work for wages, but being unorganized, or loosely organized, and inarticulate, they are treated as an outcast minority.

"I was a welder in a steel mill," an employee wrote to Congressman Hoffman of Michigan. "They (the S.W.O.C.) froze me out by threats and then ordered their members not to speak to me. But I'll be darned if I'm going to pay dues into an organization when its officers can't even speak English."

He wanted to know if his government couldn't do something about it.

The slightest trifles are magnified into labor disputes. One company tacked up on its bulletin board a notice expressing the hope that, with the nation at war, the harmonious relations heretofore existing between employees and management would continue. The notice was made the subject of a complaint to the National Labor Relations Board on the ground that the Wagner Act forbids an employer from influencing his employees in their union affiliation. Since the company had a contract with one union, this expression must perforce have been an employer trick to damage the prospects of a rival union—in this case a C.I.O. local.

An employer could do nothing at all about these matters, even if he were as human as Abraham Lincoln. The big labor controversy is no longer between management and organized labor. It is one between or among rival groups of labor.

Among the network of government agencies concerned with labor relations, no design is visible beyond that of appeasing the more aggressive union leaders and heading off any independent political cleavage of labor on a national scale.

Government agencies overlap

IN the first place, the jurisdictions of these several agencies are not well defined. A busy Mid-West manufacturer of an important munitions item recently was summoned before the National War Labor Board on a case involving a routine matter of union representation that the N.L.R.B. should have decided and which was in fact later referred to that body. Employers don't know to whom to appeal in case of stoppages. Union leaders shop around until they find an agency that is sympathetic to their demands—which is never far to go.

The Department of Labor Conciliation Service conciliates, or is supposed to do so. The N.L.R.B. adjudicates and administers. The National Defense Mediation Board mediated. The new National War Labor Board mediates and arbitrates. The Labor Advisory Council to O.P.M. advised. The President's War Labor Committee formulates in Washington the grand strategy of the unions.

But the citizen not familiar with the hair-splitting terminology of labor specialists suspects that justice may go begging among all these formidable tribunals for lack of a little old fash-

(Continued on page 73)



Despite all the federal boards, brute force is still the court of last resort in labor disputes



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Chromium is the key that has opened—and is still opening—great new fields of application for steel. Without chromium, the whole wonderful series of *stainless steels* would not have been possible. From tarnish-free tableware to corrosion-resistant chemical equipment... from strong, lightweight truck bodies to streamlined trains and airplanes... from heat-defiant boiler tubes to high-temperature steam turbines... chromium has made possible a *steel* with properties of the *noble metals*.

But the stainless steels are only one great contribution of chromium. This element has also helped to provide hard, shock-resistant armor plate and armor-piercing projectiles; long-wearing engine valves; strong, tough gears, tools, ball bearings, car trucks, shafts, springs, and dies; and hundreds of other improved articles.

We do not make steel of any kind. But for over 35 years, we have made ferro-alloys and alloying metals used in steel-making. Among these are chromium, silicon, manganese, vanadium, tungsten, zirconium, columbium, and calcium.

It was our research and development that made the low-carbon grades of ferro-chromium available commercially. Without these, production of a majority of the stainless steels would have been impracticable. Inquiries about stainless and other alloy steels—their manufacture, fabrication, and use—are cordially invited.

The progress made by Electro Metallurgical Company in the manufacture and use of ferro-alloys and in the development of alloy steels has been greatly facilitated by metallurgical research in the laboratories of Electro Metallurgical Company and Union Carbide Company; by the advances in electric furnace electrodes and techniques of National Carbon Company, Inc.; and by the broad experience in the production, fabrication, and treatment of metals of Haynes Stellite Company and The Linde Air Products Company. All of these companies are Units of Union Carbide and Carbon Corporation.

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Washington



and Your Business

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Comin' Round the Mountain . . .

THERE are highly placed officials in Washington who are so honest they do not believe any one else can be honest. For two years they have been tying back the war production program.

"All contracts must be let in open competition," was the order.

They had back of them a bookful of laws, decisions, reports and precedents. No doubt that in peace-time this close scrutiny of every dime is necessary. But in a war in which billions are being spent almost without an audit adherence to that rule seems like tom-foolishness. Little factories simply cannot live in a race with big factories. Floyd Odlum said that 375,000 small businesses would be destroyed—"at least." The A.F. of L. reported that 1,500 one-industry towns would be ruined in New England alone.

Little Men May Live

NELSON has cut the tie-back. Little factories can get contracts on negotiation now. There is no open evidence that much attention has been paid to the human suffering which was inevitable under the ruthless competitive plan but at least the W.P.B. will be able to speed up production. The unco honest men charged that big industry had blocked the system by which goods may be bargained for but, so far as this corner can discover, the charge is simply not true. The big industrialists went after business as against each other and, in the heat and flurry, did not stop to think of the little man. But in the pre-war days they helped set up the plans by which small business was to get its share. Those plans were thrown away two years ago.

Pre-viewing a Retrospect

HISTORIANS will some day view with something approaching stupefaction the war production scheme which calmly accepted the ruin of hundreds of thousands of small business men and little communities. It will seem to them like something that came out of a rarebit. Obscured by the necessities of the war production program, by the deluge of news from every part of the world, only those who actually suffered knew the misery which followed a program in which only the ends were looked at. There is a widow in Tennessee who had been making a living selling tires.



"Did Leon Henderson stop to think that I will starve if I cannot sell my tires?" she asked. Even Donald Nelson, a real business man, kind and considerate in his personal relations—his associates will fight for him—said more than once:

"The job is to produce, no matter who gets hurt."

America's First Victory

THE explanation must be found in the confusion, the rainbow chasing, the cluttered up administration of the first two years. Barber Brown of the Cosmos Club explained his arrest on a traffic charge:

"I was amatooring through traffic."

Fantastic figures and enormous promises filled eyes and ears. Washington was flooded by men and women who were untrained, uninformed, in too many cases mere jobholders, and too often equipped only with a springboard and a pool. Disorder is being reduced to something like order. In the W.P.B. they think that, when Nelson did away with the tie-backs, America won its first victory in the war. The small business man has not yet been saved. Far from it. But at least his plight has been examined. Senator Taft, Ohio, in the Senate Banking committee, made it clear that, while the one-man-boss plan would not be interfered with, the committee would see to it that constructive bossing shall be done.

Who's a Parasite Now?

THE men in the government departments who come in hand-to-hand contact with the people say that only the professional warm-hearts are soft. Some of them are very sick of the blather of evangelism and exhortation. The real American, they say, is a tough-fibered hombre. He knows that actual suffering is ahead. The average loss of weight in the next year may run to ten pounds. Cream and butter and cheese and lard will be short and they all affect the beltline. Before this reaches print it is possible that practically everything in common use will be rationed. Gasoline, fuel oil, clothing, meats, flour, tinned stuffs. The actual rationing is being held up by physical difficulties. In New York City alone, for example, 30,000,000 blank forms of various kinds will be used. The first printing order for the whole country was 700,000,000 cards. Hoover had a simpler plan, but nowadays we like the European methods. They are grand for the clerical industry.



Pattern of the People

THESE things are being accepted with a hard-lipped resignation, along with cruelly high taxes, and the certainty of lifting prices. Until Nelson issued his negotiated contract order—say some observers—some feared the whole pattern of American life would be changed. They foresaw deserted villages, over-

packed towns, new habits for old. Others note that the pattern of life has been changed before. We came from muzzle loading rifles to Bren guns, from dirt roads to a 60 mile speed limit, from the cottage organ to short waves, without being bothered. The pattern of the people is not likely to change. They will go on making a life pattern as they like it.

McKellar is a Witness



SENATOR McKellar of Tennessee will take the stand. In the U. S. Senate they believe he can put one hand over his eyes and hear within a decibel what the fourth class postmasters are saying. He introduced a bill to do away with the C.C.C. and the N.Y.A.

"The O.C.D.," he said, "has become a laughing stock with its fan dancers and artists."

Lowell Mellett wants a new building for his Office of Government Reports. There are stories that he wants copper plumbing, indirect lighting, W.P.A. landscapes of cows and waterfalls, escalators, three inch rugs for the happiness of the press agents he would add to the more than 3,000 full-time P.A.'s and the 31,000 part-time publicists now on the payroll. McKellar snorted:

"You are making this the most ridiculous government in the world."

"When You Say That—Smile!"

McKELLAR isn't smiling. The significance is not in what he said but in the fact that he said it. No one has more loyally supported the New Deal. He was a hearty booster for the T.V.A. until the Douglas Dam promised to submerge some of the best tax-paying land in Tennessee. He seems to be, if he will pardon a light simile, a feather in the wind. The wind is blowing from the states.

He Went on From There

THE Budget Bureau has been safe under the wing of the White House, but Congressman Tarver reduced the factor of safety. He "resented attempted supervision by the Budget of congressional discretion as unauthorized by law and an abuse of power." He took a very hearty kick at the O.P.A. over sugar. The Federal Crop Insurance Corporation, he said, never has and never will be able to work successfully, in spite of administrative optimism. The Farm Security Administration has backed collective farming on the Russian plan. All of this means that the voters are asking for a return to businesslike methods in the national administration. Which is all the critics have been asking for.

"I'm My Own Man"

TIME out to think over what Nelson has done. The story has a significance. It became known that he proposed to name a Board of Thinkers, to investigate, prosecute and prophesy for him. They were to be the ears and eyes of the man who is in some respects the biggest man in industry today. Twenty, count 'em, 20, volunteers hurried in with lists of names. Every one said that Harry Hopkins would approve his candidates. That's like bringing the stone tablets down from The Mount. Nelson did not look at a single list:

"I'll pick my men myself," he said.

Nothing like that has happened in Washington since the first shot was fired in Poland. Hopkins's o.k. has been considered essential on every big name. Ask Willkie.

He Didn't Hear the Word

THIS rests on gossip only but facts in Washington are often not as dependable as the whispers. The English used to say that high society in London was as loose as a goose, but Lords and Duchesses are reticent compared to the cocktailers on the Potomac.

"The President told Nelson to have a big clean-up when he took over W.P.B. Make everything look good."

Nelson did not hear The Word. He is cleaning up W.P.B., one man at a time, but is avoiding anything that might look like a purge. He thinks in the end he will build up a better organization than if he rode in on several horses.

Say It Isn't So, Felix

ONE of the titbits of gossip is that three members of the Supreme Court would like to get out of their black robes:

"Two of them," one hears in whispers, "are tired of Justice Frankfurter's monologues."

The good justice taught a law class for a good share of his life and no doubt contracted the habit of telling 'em. Every one agrees that he is interesting, informative and authoritative. Certain other members of the Supreme Court feel they could be if they were given a chance.

Getting Back to Nelson

IF NELSON had failed in his effort to coordinate the production set-up, some observers refuse even to guess at what might have happened. The one fear they express now is that Harry Hopkins may interfere. This is based on the fact that Nelson is a Republican—although not given to the practice of politics—that there might be talk of him as a presidential possibility, and that Hopkins is utterly devoted to the President and has greater weight with him than all the rest of his advisers in a row, and is a sick man, high-tempered, and a resident guest at the White House. Maybe Nelson did not tell the story, but around W.P.B. they say that he was reminded of the story of the Scotch sexton who approached the old lady who was unlimbering a long black ear-trumpet the better to hear the pastor:



"Aye toot," said he grimly, "and ye're oot."

What's Ahead of Us

NO ONE would say that W.P.B. has attained even a fair efficiency. But it is moving that way. Nelson heard of one manufacturer who tried to tell his sales story to a subhead who was reading a newspaper.

"Go on," said the subhead, rustling, "I can hear you."

That subhead does not even remember how he got out of W.P.B. Contracts for $5,000,000 for the Army and Navy were held up in one typical case. An inspired muddler changed the specifications needlessly. The manufactory was shut down. Don Reagan of Benton Harbor, Mich., was fired by his employers because he told to a newspaper the story of a five-week-long run-around in Washington. One of Nel-



BLACK POWER for the Red, White and Blue

Now, as never before, "The Coal Bin of America" is one of American industry's most vital resources. These great bituminous coal fields are an inexhaustible source of power. They lie largely in *The Chessie Corridor*—that extraordinarily rich industrial area served by Chesapeake and Ohio Lines. Protected by mountains that make the *Corridor* a natural fortress, hundreds of plants here are turning out war materials of every sort . . . at the very fountainhead of quickly available, low-cost power.

But Black Power is only *one* of the *Corridor's* resources now serving the Red, White and Blue. This region is also a treasure house of many other raw materials, abounding in mines, forests and farm lands. In bygone years of peace, many a new industry came to *The Chessie Corridor* because here are many answers to low-cost manufacture and economical marketing. Today, like Chesapeake and Ohio Lines, they are geared for war. Tomorrow—when dominance in post-war markets will be hard to gain—many an industry will find location in the *Corridor* a major asset. If you are now planning for that difficult "tomorrow," you should know the facts about *The Chessie Corridor...TODAY.*

Quick Facts for Busy Executives are graphically set forth in a 56-page book called "The Chessie Corridor . . . Industry's Next Great Expansion Area." Copies will be mailed to executives requesting them from INDUSTRIAL DEVELOPMENT SERVICE, Chesapeake and Ohio Lines, Huntington, West Virginia.



THE CHESSIE CORRIDOR, *Served by*

CHESAPEAKE AND OHIO LINES

Geared to the *GO* of America!

Serving WASHINGTON • NORFOLK • NEWPORT NEWS • RICHMOND • VA. HOT SPRINGS • WHITE SULPHUR SPRINGS
CHARLESTON • HUNTINGTON • ASHLAND • LEXINGTON • LOUISVILLE • CINCINNATI • COLUMBUS • TOLEDO • CHICAGO

son's new regional chiefs heard the story, the company got the contract, and Reagan got his job back.

Streamlining the Army

THE three-pronged air, land and supply alignment in the Army came about under pressure. It had been General Pershing's idea originally and perhaps had been coldly looked upon for that reason. For 25 years the admirals have been standing by the battleship. The pressure for recognition of the new type of sea war became so formidable that it is highly probable that, although the battleships now on the ways will be completed, the hundreds of millions of dollars earmarked for future battleships may be diverted to the building of fast, highly maneuverable ships and more submarines. Years ago Admiral Taussig reported on the faults of the navy system and prescribed correctives. He was retired. Other reports on the Taussig line are being listened to. A radio ace was retired not long ago because he was outspoken. He may be called back to speak his mind freely. The letters from home occasioned this change in attitude. Too many of them were getting into print.

O.C.D. Lighted the Fire

IT was the discovery of the ballroom dancer and the film star on the O.C.D. rolls that really started the letter-writers' revolt. The suggestion that a tough nation of 132,000,000 needed vaudeville acts to keep it in the mind to fight is ancient history now, but it is not to be forgotten because of that. In the history of the war it will be given tremendous significance.

Shadow of Things to Come

THE Inter-Allied G. H. Q. is a product of the pressure from folks back home for greater efficiency. British had been fighting for more lend-lease goods. Americans had been trying to defend the needs at home. The demands and resistances were channelled through Boards and Commissions from the White House to Downing Street. A by-product was the press and radio campaign for kinder treatment of our Allies. British and American ideas, manners, and vocal habits are not the same, but they can usually fight themselves into friendship if face to face. Now the military chiefs of the Allies are housed together in a building with a wire fence around it, sentries at the gate, and searchlights at night, and they thresh things out. The British, for instance, wanted to hold Turkey from the Axis by giving quantities of American made goods. The Americans said we needed them ourselves. In the end a statement of facts was agreed on for the guidance of the political heads in reaching a decision.



Not to be Ungallant----

GOSSIP is that the girls who cover Mrs. Roosevelt's press conferences are being burned by their editors. When the O.C.D. rumpus was at its funniest some men reporters crashed the gate and asked questions.

"Outrageous," said Mrs. Roosevelt. "I may be forced to hold future conferences in the White House where the men cannot get in."

Some editors have suggested that this makes the girl reporters look a good deal like mouthpieces and nothing else. Of course, it isn't true. Any male competitor will guarantee that they are as desperate in the pursuit of news as a reporter in the films. But—still—

Best Burn the Letter



THOSE who feel inclined to write direct to the President should know that such letters go through a Secret Service routine. Mr. Roosevelt definitely resents letters that are not nice, and the writers of such letters will be looked up by the S.S. One good looking girl wanted the Government to send her to Berlin for a talk with Hitler. She thought she could coax him out of his nonsense.

"The Government should provide me with a nice wardrobe," she wrote. "Then I think Colonel Lindbergh should fly me to Berlin, and as I do not understand German, H. V. Kaltenborn should be sent along as my interpreter."

She's on the Nut List Now

HER letter went on the nut list. Once on that list the unfortunate never gets off. If the S.S. hears, years from now, that such a letter writer wrote a man about a dog it would look in the file. Bingo.

Calling for Byrd

SENATOR BYRD of Virginia has been asking without success for a $2,000,000,000 cut in non-defense expenditures. He should be advised that a start has been made. The Secret Service operatives are all crack shots. One is one of the country's aces. Secretary Morgenthau, guardian of the $145,000,000,000 debt, is also titular head of the S.S. He has cut down the amount of practice ammunition the S.S. gets.

Order in the Court!

THE Department of Justice brought an action against a teamsters' union in New York, under the federal anti-racketeering statute. They were accused of holding up trucks at the Holland Tunnel and compelling their drivers to pay $9.42 for driving them to a destination.

The Supreme Court decided, six to one, that the union teamsters were guiltless under the clause of the act which conferred immunity on a "*bona fide* employee" who used violence to obtain "the payment of wages from a *bona fide* employer." Justice Harlan F. Stone dissented. Such theories, he said, "would render common law robbery an innocent pastime." He called the racketeering teamsters "extortioners." The truck owners paid money "only to avoid a beating." Up the black flag.

Something to Remember

IN Alfred Lief's book on Justice Stone's decisions—"Public Control of Business"—he notes that Stone was often in the minority, as he was in this case. He frequently saw the Supreme Court reverse itself and accept his view of the law. The three judges with whom he most closely cooperated were the three great liberals Holmes and Brandeis and Cardozo.

Herbert Corey



★ *Invest in America! Buy Defense Bonds and Stamps*

Who's Going to Step into their Shoes back at the office?

With new workers taking the place of men in uniform, America's millions of office machines become a priceless war-time asset

Maybe this happens in *your* office . . . work delayed because two workers need the same typewriter. Make sure immediately that you have enough machines to go 'round and that every one is in good operating condition. When good men leave *your* payroll for Uncle Sam's, office personnel will have to work harder than ever. Give them the facilities to make the extra effort count. Do away with typing bottlenecks.

"Yes, Mr. Atherton, these accounting machines are giving us just what we needed. Should have had them long ago. The new men? Oh, they're coming along all right. Right now, of course, they can't carry the load that Brown and Miller used to handle, but what we lose on that score these Underwood Elliott Fishers will more than make up. You should see how simple they make stock record control, order writing, billing . . . one short-cut after another, yet with complete accuracy!"

This young lady and her Underwood Payroll Machine are fighting on the side of the Allies. You see, the draft and enlistments greatly increased the work of the Payroll Department . . . so many new names to handle! And then several of that Department's best men marched off in uniform. Yet all hands are being paid promptly, accurately and with adequate, explanatory data. Thus, time and energy are being saved for the production of materials to back up the good men who left.

"Jim, do you think we're doing all right? After all, we haven't had much experience with this type of work." The operator of the Underwood Sundstrand Adding-Figuring Machine stops for a moment to answer: "I *know* we're doing all right and it's because of this little machine. Suppose we had to make all these calculations with no help except pencil and paper! We'd never be able to double check every step and be sure of our ground. Just wouldn't have enough time or energy left."





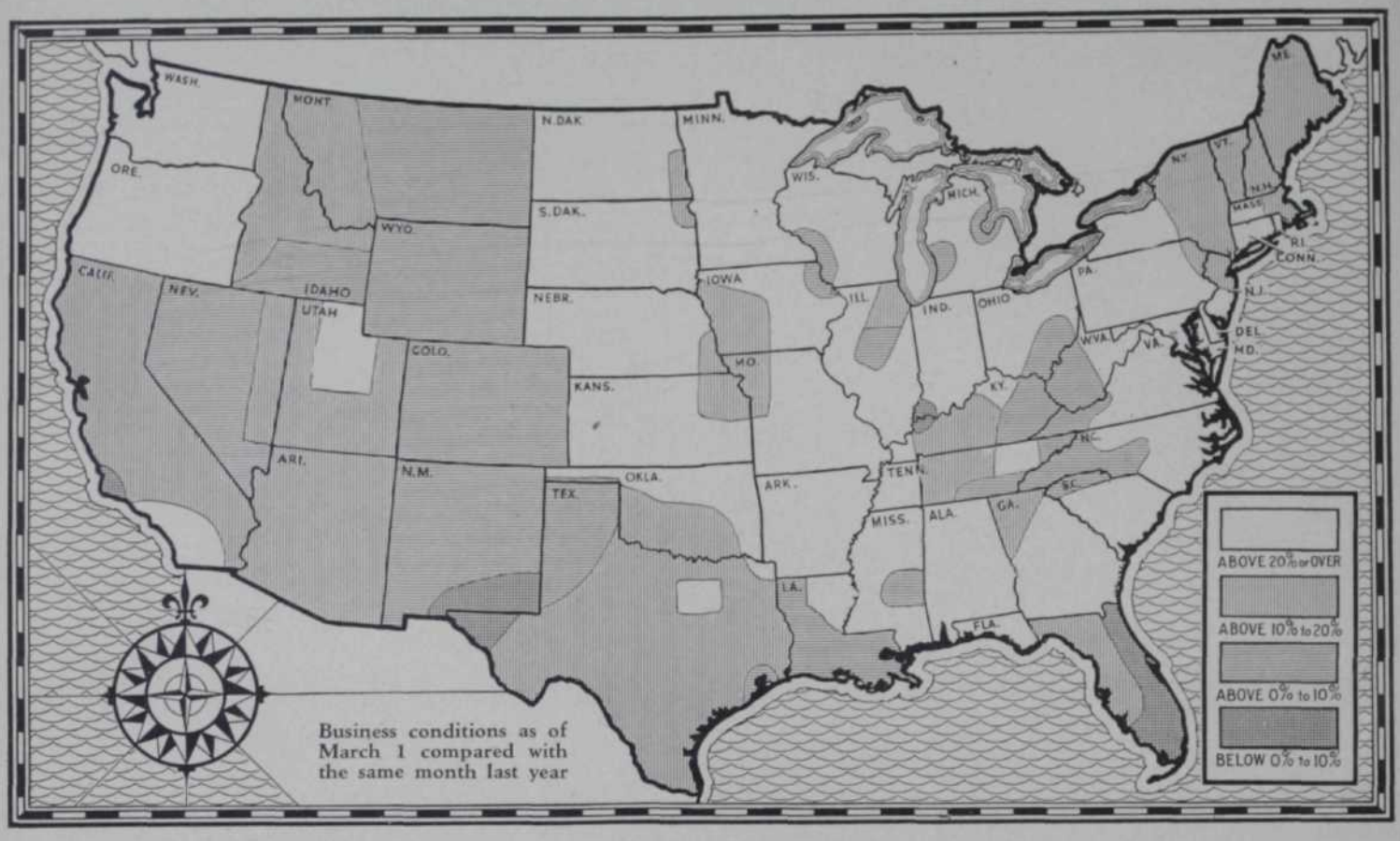


Underwood Elliott Fisher
Helps Speed the Nation's Victory!
Underwood Elliott Fisher Company
One Park Ave., N. Y. *Sales and Service Everywhere*

Copyright 1942, Underwood Elliott Fisher Company

The MAP of the Nation's Business

By FRANK GREENE



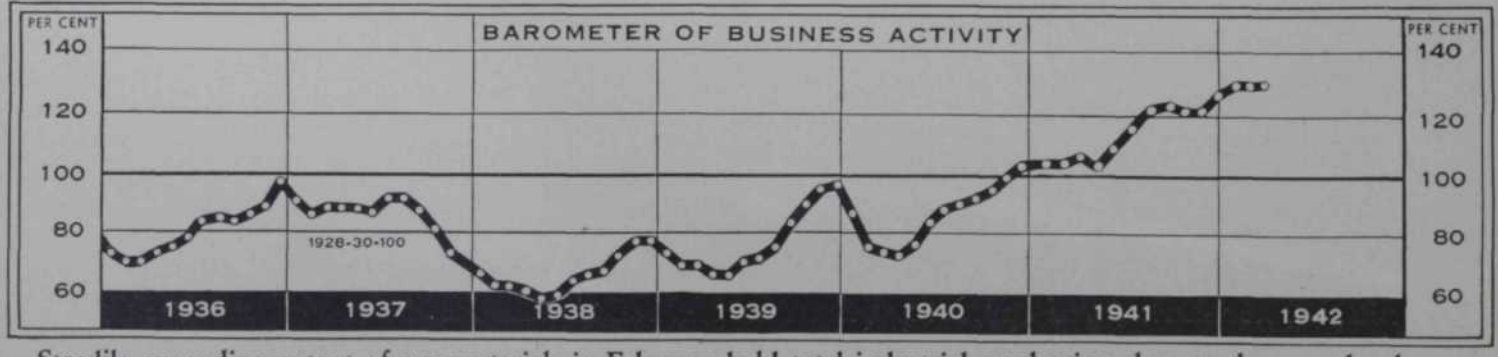
INCREASING war production during February continued to outweigh curtailment of non-defense industry. Steel output set a record as scrap shortage eased slightly and war needs absorbed all but vital civilian requirements. Automobile manufacturers were confined to munitions and essential trucks while airplane and shipbuilders' output were again revised sharply upward to meet the growing national emergency.

Freight carloadings, though at 1930 levels, were reduced slightly during conversion of industry into defense work. Increasing federal construction overshadowed private building as engineering awards increased and electricity output ran close to previous peaks. Stock market prices again declined and turnover reached quarter-century lows, despite improved corporate profits. Wholesale commodities reached highest prices since July, 1929, led by farm products, up 45 per cent over last year.

The new marking of the Map depicts percentage changes in business conditions from the same month last year (although last month's map, below, is on the old key)



The map of last month



Steadily expanding output of war materials in February held total industrial production close to the record volume for January, despite growing restrictions on the manufacture of consumer durables



A farm, a factory, a finished engine —and 243 days

AS THIS is written Buick is now in regular production on airplane engines for Army bombers.

They are, we are told, outstandingly good engines—*the first one put together finished its "green" run, its "tear-down" inspection, and its "final" run with a perfect score.*

That is something of a record, and every engine that has come off the assembly line since is, we are also told, *distinguished in its every part by workmanship and finish that are exceptionally fine.*

VICTORY is our Business GM GENERAL MOTORS

That this is true is in no small measure due to the helpful and patriotic cooperation of Pratt & Whitney under whose license we build, and we wish publicly to acknowledge it here.

Just 243 days sped by, from the morning the ceremonial spade first broke ground on the prairie farm that was our new factory site, to the night the first finished engine went to the Army.

In that narrow bracket of time, new plants were built, old ones converted, special plant layouts devised, machines and tools designed, ordered and installed, crews trained, techniques perfected.

Six months after ground was broken on one vast new factory, the keys were turned over, and into that plant alone had gone 10,000 tons of steel, 3,000,000 bricks, 145,000 panes of glass, more than 250 miles of electric wires and cable.

Two months later productive work started, and today in the roaring test cells of that factory the great engines in steady procession proclaim with mighty voice that this vital war project is a producing reality.

Meanwhile, the original production program was doubled, then doubled again, until it quadrupled the initial schedule.

And this is only one phase of the part Buick has undertaken in the nation's war effort—we are driving ahead on the production of heavy tanks, gun mounts, shells and other war goods toward a volume that will absorb the skills and energies of 40,000 men.

We believe that in the swift progress we have so far made, our countrymen will discern anew the undefeatable capacity of America.

We men of Buick like to look upon it, also, as our way of remembering Pearl Harbor.

WHEN BETTER *war goods* AUTOMOBILES ARE BUILT
BUICK WILL BUILD THEM

NO BUSINESS *Can Escape* CHANGE

With ever faster industrial production, the larger part goes to war, but civilian life gets a share

1 • PLASTIC reflecting discs about the size of a nickel are now made with a hole in the center for nailing or screwing into place. They can be worn on belts or clothing as a safety measure at night or in blackouts, or can be used as danger markers, on vehicles, or as advertising signs.

2 • A NEW phenolic molding compound has a very low power factor (0.07 at 1000 K.C.) and high dielectric breakdown and fatigue values. It has excellent moldability, was designed for radio parts.

3 • TOOL SHANKS for carbide tips are now cast to shape from a high tensile strength alloy. Compared with forged steel, the alloy has better heat conductivity, a coefficient of expansion closer to that of carbide, and uses no minerals on the strategic list.

4 • A NEW METHOD of treating black plate makes it available for cans and other containers in many uses previously requiring tin plate. The process gives a fine-grained rust-inhibiting phosphate coating which can be lacquered or enameled and put through fabricating processes, without damage.

5 • A NEW ALLOY for collapsible tubes is made of less critical metals. It is suitable for toothpaste, creams and ointments and can be made resistant to ingredients of acid or alkaline characteristics.

6 • A NEW LUMINOUS paint is weather resistant, has long afterglow. It is available on tape one to four inches wide and in bulk. It is non toxic.

7 • AN AUTOMATIC recorder of acidity-alkalinity, expressed as pH, is now made to give simultaneous records of pH at separate and independent points in a fluid-flow system on the same chart. It enables the operator to see continuously the effectiveness of the process or treatment in use.

8 • A PORTABLE searchlight unit is now made as a 24 inch searchlight with 3½ million candlepower that throws an effective beam for one mile. It has a self-contained power source and two smaller floodlights for auxiliary or general lighting. It is expected to find many industrial uses.

9 • A NEW TRANSLUCENT coating for window glass (or other reflecting surfaces) effectively prevents reflections by day or night. When applied to sunny windows, it cuts down the glare inside. It is made in a clear white and tints.

10 • FOR EXTINGUISHING magnesium fires (incendiary or other) a method has been developed using a hard coal tar pitch which softens slightly and seals the magnesium in an airtight blanket, smothering the flames.

11 • AN ELECTRICAL instrument for measuring resistance values up to 2,500,000 ohms in six ranges uses a Wheatstone bridge, and has a cathode ray visual null indicator. The scale length is 14 inches used for each of the six ranges. As a conductivity bridge it can be made to detect impurities in distilled water of the order of one part in 2,000,000.

12 • FOR CIVILIAN defense there is a new steel air raid helmet which is similar to but heavier than industrial hats. Styled after the doughboy's tin hat, it has a fully suspended shock-absorbing headband, and a leather headband and chin strap.

13 • CANDLES, only five inches high which burn approximately nine hours each, are now available for emergency use.

14 • CELLULOSE PLASTIC tubing is now made in seamless extruded continuous lengths from 3/16 inch to ¾ inch in diameter. The tubing may be bent, formed, or curved to fit almost any condition. The ends are easily adapted to standard flared fittings with the same tools used for copper tubing.

15 • A NOVEL SAFETY razor has spring-driven power to make the blade move in short, gentle side strokes. The mechanism is sealed in oil. It's said to give a smooth shave quicker.

16 • A PLASTIC CORK coating that stops condensation drip and is applicable by brush is now made. It is spread one-quarter inch thick over metal, concrete or other material and can later be painted any color. It is odorless, vermin proof, and self-bonding.

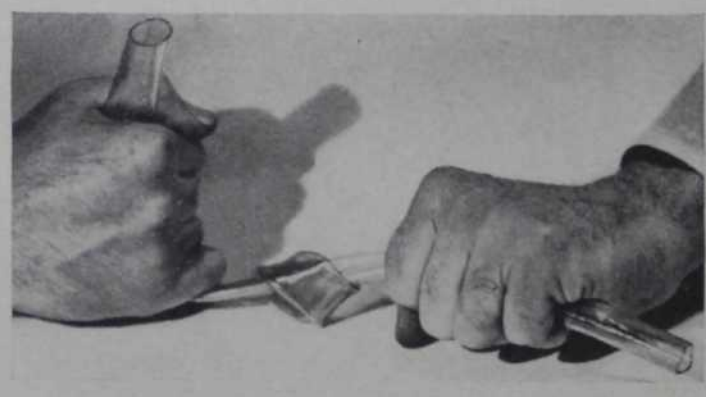
17 • A NEW INSULATING board which can advantageously replace cork boards for low temperature insulation is made from glass fiber sheathed in high melting point asphalt. It is immune to rot, decay, and fungus and is odorless at low temperatures.

18 • A SYSTEM for increasing effectiveness of guards along fences at night has been developed which utilizes acoustical apparatus to pick up unusual sounds. Guards can use the fence sound system to report to the central guard station, either by signal or by voice.

19 • A SMALL pocket folder is now made to give a summary of first aid rules, indexed so that it can be opened to any subject. It is available for individuals, or for firm distribution.

20 • A FOLDING metal awning is now made that, in its half-closed position, is an effective sunshade and stands out from the window sufficiently to shade the bottom normally. When fully closed, telescopic sections with light-proof gaskets between them afford an effective blackout awning with simultaneous resistance to outside blast and flying splinters that might break glass.

21 • A NOVEL device to lock fluorescent lamps against vibration helps prevent premature lamp failure and loosened lamps. It is easily applied. —W. L. HAMMER



22 • A TRANSPARENT tubing for electrical insulation has excellent resistance to brittleness down to minus 50 degrees Centigrade. Its toughness and rubber-like qualities make it useful for a wide variety of industrial and electrical applications. It is available from size 14 to ⅝ inch inside diameter.

EDITOR'S NOTE—This material is gathered from the many sources to which NATION'S BUSINESS has access and from the flow of business news into our offices in Washington. Further information on any of these items can be had by writing us.

Britain Converts by Nucleus Plan

HALF of nation's $40,000,000,000 armament output scheduled for 1942 must be supplied by men and machines that last year produced civilian goods. Fear is that new arms plants built and building and conversion of durable goods industries now well under way, will not be enough.

Increasing proportion of armament output looks to semi-durable, perishable and distributive-service industries. Essential civilian production in these industries and some semi-luxuries, might be concentrated in a few plants, possibly under a plan similar to "nucleus" idea developed in Great Britain. Remainder would be converted to arms production, or else would be closed to release their men and facilities for war production.

Production is concentrated

Under the "nucleus" plan, British production for less essential civil uses has been concentrated in a reduced number of factories working full time. Previous attempts by cutting production quotas had closed only a few plants. Degree of concentration necessary was indicated by the Board of Trade, but individual firms were encouraged to arrange for necessary changes by voluntary action.

Industries covered in British plan are primarily producers of semi-luxuries, include: Cutlery, linoleum, carpets, fountain pens, combs, blown glass, plates, gloves, umbrellas, photographic goods, hosiery, fishing tackle, braces, toys, lace, pottery, mechanical lighters, musical instruments, jewelry, corsets, perfumery, leather goods, sports goods, plastic goods and bedding.

Other industries, already subject to raw material control, were also made subject to concentration. Examples: cotton, rayon and silk, wool, boots and shoes, and some paper-using industries.

To qualify as a nucleus firm, the National Industrial Conference Board reports, arrangements had to be made with other firms that permitted applicant to "run full," or as nearly full, as circumstances allowed. Other requirements included complete closing down of factory or works whose output was to be transferred to nucleus firm; satisfactory financial compensation for firms to be closed; plant of the closed firm to be kept intact, unless requisitioned; provision for maintenance of production for export and for the Government, previously un-



VERTICAL CONTACT MOTOR CONTROL



a simple, proven method of avoiding trouble and delays in all-out production

A good many years ago Cutler-Hammer engineers solved a problem of Motor Control performance that has constantly gained in importance with each advance in the use of electric power by America's factories. A simple idea . . . designing Motor Control contacts to operate in a *vertical* position so that dust and grime *could not collect* on them and interfere with their proper performance...it made motorized machines more dependable, avoided delays, saved maintenance time and expense. NO man need be told that dirty, sticky contacts in Motor Control mean trouble and that Cutler-Hammer self-cleaning, dust-safe *vertical* contacts contribute directly to the smooth, unhalting production so necessary to America's present all-out drive for national security. These are not times to take chances. Insist on genuine Cutler-Hammer *Vertical Contact* Motor Control. CUTLER-HAMMER, Inc., 1251 St. Paul Ave., Milwaukee, Wisconsin. *Associate:* Canadian Cutler-Hammer, Ltd., Toronto.



Copyright, 1942, Cutler-Hammer, Inc.

CUTLER-HAMMER
MOTOR CONTROL
C-H

1892-1942 50th ANNIVERSARY

WHAT *ONE* FINANCE COMPANY IS DOING FOR WAR-TIME INDUSTRY

Industry must organize promptly all available facilities—manpower, plant, machinery, material and money—to win the war.

For thirty years we have been extending financial assistance to American Industries and are now especially desirous of assisting those established mills, manufacturers and wholesalers engaged in or seeking to engage in war-time production. We have Invested Capital of $66,000,000, Resources of $450,000,000, and during 1941 financed over $1,000,000,000 of receivables for our customers.

If your present financial arrangements are inadequate or unsatisfactory, possibly we can help you. We have no "ready made" financing plan to submit, but we should like to consider your problem with you and then try to adjust a plan to meet your requirements. We eliminate much of the red-tape and time-lag usually involved in financing and we do not interfere with the management of your business.

Our financing facilities are available to supply established concerns with sufficient cash or credit to permit their acceptance of Government contracts and to speed up production under such existing contracts. We supply working capital at reasonable rates upon current open accounts and inventories and for the purchase of machinery. We will also finance the enlargement of plant and equipment facilities under "Certificates of Necessity" issued by the Government.

We will purchase your current open accounts, including those for war material, *without notification* to your customers—and *limit* your risk of credit loss thereon—and permit credits and collections to be handled by you as usual. Our "Factoring" subsidiaries will finance such receivables *with notification* to your customers and relieve you of *all* credit, collection and accounting expense and all risk of credit loss.

CONDENSED CONSOLIDATED BALANCE SHEET
COMMERCIAL CREDIT COMPANY AND ITS SUBSIDIARIES
As of December 31, 1941

ASSETS:		LIABILITIES, CAPITAL AND SURPLUS:		
Cash	$ 50,174,282.91	Unsecured Short Term Notes		$276,837,500.00
Accounts and Notes Receivable	394,026,912.92	Accounts Payable, accruals and taxes		16,065,955.81
Repossessions in Company's possession, at depreciated values	355,172.87	Notes Payable, unsecured, Due 1943-1949		46,500,000.00
Investments in Securities	5,056,592.65	Due customers when receivables are collected and dealers participating loss reserves		14,340,275.01
Deferred Charges	1,808,048.46	Reserves for losses and contingencies		9,972,476.90
Furniture and Fixtures	7.00	Deferred Income and Charges—unearned		20,970,299.66
	$451,421,016.81	Capital Stock and Surplus:		
		Minority Interests	55,215.78	
		Preferred Stock, 4¼% $100 par value	12,193,800.00	
		Common Stock, $10 par value	18,414,730.00	
		Capital Surplus	17,672,463.42	
		Earned Surplus	18,398,300.23	66,734,509.43
				$451,421,016.81

Note: This Balance Sheet is condensed from the Annual Report to Stockholders, December 31, 1941, to which you are referred for analysis of items condensed herein. Copy furnished if requested.

COMMERCIAL CREDIT COMPANY
BALTIMORE
NEW YORK CHICAGO BOSTON SAN FRANCISCO LOS ANGELES PORTLAND, OREGON

dertaken by closed firm; finally, the labor released to be of type most likely to be absorbed into the war industries.

In return, the Board explains, nucleus firms gained advantages, principally inclusion in the Government's list of protected firms. As a result, a lower age reservation was applied to workers in nucleus firms and greater consideration was also given those firms when applications for deferment were considered. Government orders were placed as far as possible with such firms, supplies of raw materials safeguarded, and plants of nucleus firms were not requisitioned except in extreme emergency.

No arrangements were made for compensation from public funds of industries forced to suspend operations. Instead, the Government required nucleus firms to provide some compensation for firms with closed plants.

About 4,000 factories in Great Britain were affected by nucleus plan. About 1,400 employed less than 20 persons, were considered too small for concentration. Of remaining 2,600, only 1,000 continue to produce for civilian consumption; 950 have been closed, and 650 have shifted to war work or are not covered.

About 50,000 men in the cotton industry were released under the plan by October, 1941; in hosiery, between 20,000 and 25,000; in carpet, about 10,000; in the boot and shoe trade, about 10,000. Total workers released, or likely to be released, is estimated at 149,000, one-fifth of labor force in affected industries. In all, about 45,000,000 square feet of factory space was released to military or war industry use.

Salesmen Speed Conversion Jobs

WESTINGHOUSE salesmen, released from peace-time activities, have become key men in company's conversion to all-out war production. In new job salesmen learned priorities regulations, located subcontractors, found war uses for peace-time machines, helped place retired electrical machines in active duty.

To help maintain production in vital plants, salesmen explained to customers how to get repair parts for old machines while priorities prevent buying new ones.

Company's sales organization brought in $300,000,000 in defense orders before war declaration. By last July, 60 per cent of the unfilled orders were for defense equipment. Con-

version of facilities to war work has moved so fast that 100 per cent wartime operation is near. Training of salesmen for their new work included sound pictures, shown in two-week period in nearly every Westinghouse sales office from coast-to-coast.

War sales force has helped other companies locate old electrical equipment and bring it back into service. Examples: A salesman in up-state New York helped a small railroad get a switching locomotive from a customer in the Middle West; a salesman in Memphis helped a munitions manufacturer obtain some used motors which enabled his plant to start operations.

Marine sales are higher

MANY Westinghouse salesmen have been transferred to marine sales work, now 20 times what it was three years ago. Other salesmen are meeting rapidly expanding demand for electric motors to drive machine tools, up from a $200,000,000 industry to a $2,000,000,000 industry.

Company's Washington office kept in touch with official administration of war effort. Salesmen have been informed how to go after defense business. Result, more than 500 different companies have been helped to put part of their plants on war work. Advisory service did not help company in direct business, did help some customers of many years standing to stay in business, particularly helped "little business" friends to turn their talents to war effort.

Salesmen contributed to placement of subcontracts with companies in 24 states for parts of war equipment which company could not manufacture fast enough alone. Example, company had order to build a large turbine for customer in New York City, had to put order aside to work on Navy equipment. A salesman made necessary arrangements to have critical parts for machine made in the customer's own machine shop under company's supervision. In another case, a salesman, calling on a rubber company, saw mold department shutting down. He started negotiations which resulted in keeping that mold department running as a subcontractor making motor frames.

Lesson is in recognizing value of men who have long had their fingers on the pulse of the electrical industry. Training of the German troops in Spain prepared them for *blitzkriegs*. Japanese soldiers who marched down to Singapore were trained on the battlefields of China. Hope of victory for America's cause rests not only on valor of armed forces, but on ability of trained heads and hands to outproduce enemies.



Ready to KEEP 'EM ROLLING

• Years ago, the Erie Railroad embarked on a vast program of expansion and modernization. Now we are ready—men and equipment—to "keep 'em rolling" for victory.

Feeding the production lines of America's Industries—carrying away their output in ever-increasing quantities...the road that service built is serving America as never before in its 110-year history. We're at *your* service, too!

For transportation information, see the Erie man.

ERIE RAILROAD

THE HEAVY DUTY RAILROAD

Passing of a Great Illusion

A CONGRESSIONAL committee has drawn from the Administrator of the Farm Security Administration the admission that the affairs of Arthurdale are to be wound up. Arthurdale, you will remember, is the first of the federal subsistence homestead projects. It was to be the model for more than 100 other units in this experiment in the more abundant life.

Some $2,679,000 was spent on this Great Expectation. Now, it is to be sold to the present tenants for $175,000, on the instalment plan. Administrator Baldwin testified that this figure was arrived at with two considerations in mind—the ability of the customer to pay and the capital involved. It would appear from the figures that rather more of the emphasis was placed upon ability to pay than the cost of the community to the taxpayers.

In the course of his testimony, the Administrator confessed that the experimenters have learned something from their failure at Arthurdale. He said they had learned that industry does not follow community building, but rather that the community follows industry.

Actually, several important lessons may be learned from the experiment, if the American people are not too punch-drunk to learn from experience.

Lesson 1: The individual can do a better job of housing than his Government. In the beginning he would work out a plan before starting to build and, because he cannot afford such luxuries, would never build, tear down and rebuild as many as five or six times on the same site, as was done in a number of cases at Arthurdale.

An observer on the ground in 1934 reported that one crew of men was engaged in ripping out three sides of completed house in preparation for Plan No. 2, while other forces of workmen went ahead erecting other houses on Plan No. 1, to be torn down in their turn and rebuilt.

After deep wells had been drilled for all 50 houses, eight of them were capped and abandoned because new sites had been chosen.

None of the underprivileged for whom the community was conceived would have been likely to lay a foundation for his barn and then cover it over with earth because an architect from



FREDERICK C. HICKS

New York decided it was too close to the house.

Lesson 2: No business or public enterprise can succeed if it resorts to sharp practices.

Fostered by the First Lady of the Land, Arthurdale had a million dollars' worth of advertising.

All of it portrayed the design, often crudely disguised, to cover up the mistakes that were being made. For the house-warming ceremony, when the first family was to take possession of its home, five loads of rhododendron were hauled from Tucker, 60 miles away, to make a homey photograph for the press. None of the shrubs was planted; they were dropped in the snow as so much dead brush. They were trucked back again the next day. Dead wild grapevines were trailed over pergolas to heighten the photographic illusion.

A posed picture of the re-housed family at breakfast in their new home was sent to the newspapers.

But the real occupants, whose names were used, did not arrive in Arthurdale until much later.

Again, the public was deceived as to progress of the development. On February 11 Mrs. Roosevelt paid a surprise visit and the newspapers reported in a government press release that "about 50 houses have been erected." On February 21 came the report that "50 houses will be ready April 1." Four months later, June 8, Mrs. Roosevelt again appeared and "expressed amazement that the 50 houses were so near completion." The next day, after her return to Washington, the press reported:

"The chief purpose of Mrs. Roosevelt's trip was to view the progress at Arthurdale, where she found 50 homesteaders living in neatly built and comfortably furnished homes, a community center building, etc."

Lesson 3: What is the state of mind of those men and women who were picked to live in Arthurdale and were lifted up in that magic carpet ride to the living standard of families in the $5,000-a-year group? (They were given everything—furniture, bedding, even one cow each.) Disillusionment today? Yes. And from that disillusionment will flow many evils.

Those who had a pang of doubt at receiving government bounty, who tasted the bitter flavor of state charity, will be resentful toward their Government. Their mental condition is much worse than it was before they were promised the abundant life.

Those who felt no tinge of debasement, likewise will be resentful and are already (as are the beneficiaries of Matanuska) blaming this, that and the other thing for somebody's failure to keep up his newly accustomed and easy way of life.

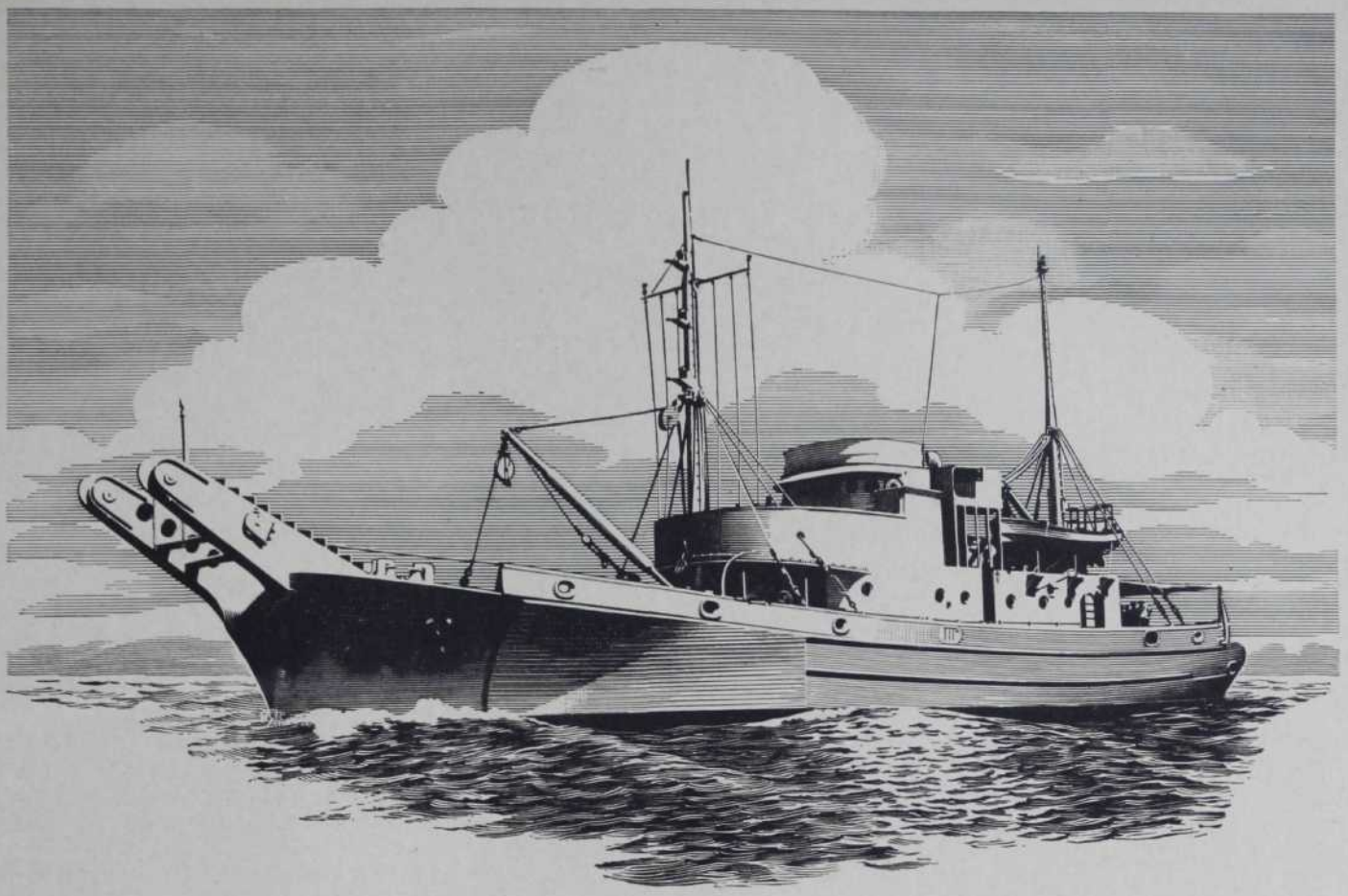
The third group, those who felt that from their savings and thriftiness had come the funds to give even a better living to ne'er-do-wells, shirkers and those less resourceful, their state of mind is also a national liability.

Lesson 4: Industry cannot be had for the wishing. Business activity cannot be legislated. Appropriations of public money, even billions, won't establish a sound economy.

Something more is necessary than for the great Government of the United States to buy a plant in Michigan and move it down to Arthurdale to make tractors. Management must come first, and the desire for—yes, let the word be used—profit. This incentive must be there.

At last, we have a glimmer of recognition of this lesson by those in authority. May its light increase.

Lesson 5: That the Government, with all its power and prestige, cannot build a home. It can build a house—though it may have to rebuild it five times—but that is not a home. Only a family can build a home, or make it a home after it is built.



These also Serve

Sub-Contracting in our National Effort

An integrated, powerful navy such as our own requires far more than the spectacular battleships, destroyers, submarines and aircraft which carry the brunt of battle. Equally vital to a functioning naval force are the auxiliaries such as the anti-submarine net tender depicted above, or fuel supply vessels, "mother" ships and repair craft.

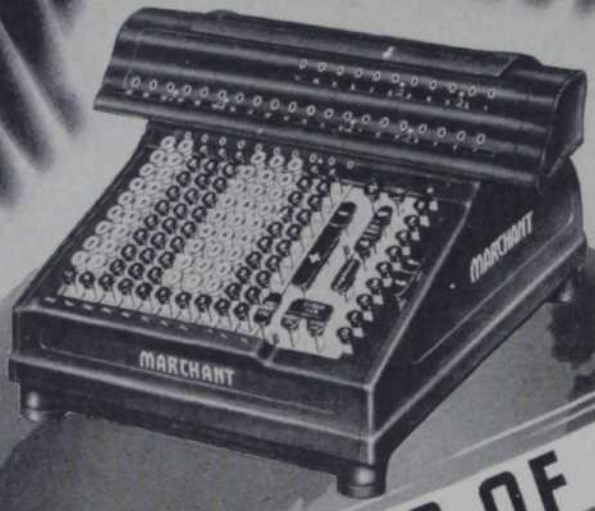
Likewise, in our war effort, the maker of parts is playing a vital role on the industrial front. The sub-contractor today is increasingly busy on the national production line. As the full victory effort reaches flood tide, armament worth billions of dollars necessarily must be produced under sub-contract each year.

Now, in this transitional period, sub-contractors face the necessity of installing new machines, of retraining personnel, of making many other adjustments. Time and credit are required. It is in the latter capacity that the Chase National Bank can be, and is, of assistance to many established manufacturers. The Chase offers its cooperation, directly or through its correspondent banks throughout the nation, to prime contractors, and to other sound enterprises which are capably undertaking indirect defense work.

THE CHASE NATIONAL BANK
OF THE CITY OF NEW YORK
Member Federal Deposit Insurance Corporation

MARCHANT

out-performs — so naturally it outsells!



20 POINTS OF *Silent Speed* SUPERIORITY

Sales Agencies and Manufacturer's Service Stations in all Principal Cities Give Service Everywhere.

The Marchant Man will gladly explain to you the advantages of the 20 points.

MARCHANT CALCULATING MACHINE COMPANY
Home Office: Oakland, California, U. S. A.

MARCHANT ELECTRIC
Silent Speed CALCULATORS
FOR OVER 32 YEARS

Heroism of the Market Place

HOW BRITISH business men met the "blitz" is a story still in the making. Contemporary accounts show that the pattern drawn by events of the past two years is unlikely to be changed by any circumstance except large-scale invasion. Background and development of London situation, as noted by The American Outpost in Great Britain.

London's old City has been for centuries the leading center upon which the economic life of the nation depends. Here are famous old business houses like the Hudson's Bay Company; exchanges where traders buy and sell company stock and oriental spices, along with every other major commodity from grain and wool and copper to cargo space in ships that sail the seven seas; great banks that finance commerce; Lloyd's and insurance companies that take the risks of sea and land; and the lawyers, accountants, brokers, and others who all play a well-defined part in the ordered scheme of the commercial world.

The Luftwaffe cannot destroy *this* City, has not been able even to disorganize it. All the Nazis could do after losing the air battle of Britain was to vent their spleen symbolically by burning or blasting City buildings. It was like the petulance of criminal children.

An astonishing sight awaited one general manager when he reached his office, not far from London Bridge. Despite the old nursery rhyme, London Bridge was not falling down but his office had disappeared. The whole building had vanished in the night. He set in operation emergency arrangements planned long before and the next day the company's offices were functioning as usual, at a quiet spot in the country.

Germany's aerial demolition workers have not succeeded in demonstrating this vanishing trick to most business houses but some have known a similar experience, and all important City firms have taken precautions against it. At the outbreak of war there was a major exodus of business from London. Some firms closed their town office and transplanted the whole activity elsewhere. Others divided their staff between town and country. Companies sceptical of air raid dangers that were as yet problematic stood their ground in London but provided alternative quarters for emergency use.

This business prudence created a sudden market for vast country

houses abandoned by their owners under the burden of heavy taxation and the increasing difficulty of finding domestic staffs. Sometimes the building would be large enough to meet the needs of, say, an insurance company, with a regiment of clerks seated at long, improvised tables in the drawing-room, the mailing department in the butler's pantry.

There were firms that fancied smaller houses, perhaps because these were easier to find in convenient places. The departments were distributed in several buildings and, where necessary, one or more houses were reserved for staff use.

Complications in housing

ANY business man can imagine the thousand and one perplexing details which had to be solved to assure smooth operation. For instance, a company which sends and receives many telegrams and cables every day could not hope to handle these communications through a small village, possibly several miles away. Such a problem was overcome by receiving and sending through the peace-time office in town the messages being telephoned to or from the country.

Urgently important has been the protection of vital records of banks, insurance companies, law offices, and the like. Old records have been reproduced by microphotography. Extra copies are made of current records so that as many as three identical files are sometimes maintained complete in widely separated places.

The spirit in which the City has taken its trials was memorably demonstrated after the fire blitz of December 29, 1940. Stenographers sat on fallen masonry taking dictation. Clerks took incoming calls at emergency telephones in the street. Mailmen climbed over steaming debris to collect from letter boxes at the regular time. On a fence in Wood Street, "removal" notices included a new address announced in doggerel verse.

The original emergency arrangements have long since been readjusted wherever experience has shown this to be necessary, and today there is a minimum of inconvenience in this wartime dispersal of so much London business. In fact, some companies now question whether they will return to the old location when the war ends. They will go back to town, of course, but the probability is that enough firms will establish themselves in other parts of London to facilitate the post-war reconstruction of the old City along carefully planned lines that will relieve the congestion of traffic and buildings without sacrificing the essential character of the Lord Mayor's domain.

The Busiest Watchman in America!

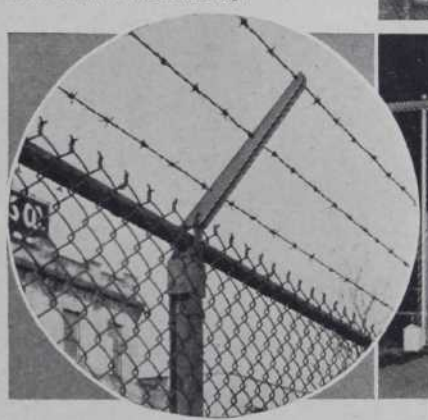


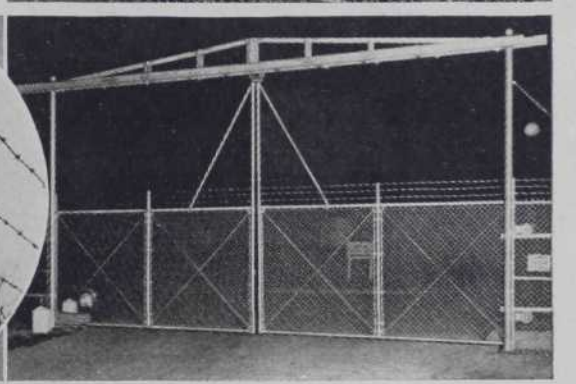
America's factories are working night and day behind "closed doors" — guarded by U·S·S Cyclone Fence from snoopers, saboteurs and other trouble makers. With such protection, your watchmen can stop everyone who enters or leaves the plant—and demand display of proper credentials.

Cyclone Fence provides a high barrier of steel. This is forceful warning that the management means business in its plant protection.

The tough strands of barbed wire are firmly held in sturdy extension arms. Several designs of arms are available, some with barbed wires extending on both sides of the fence top.







Don't let any "leaks" exist. Guard every walk or driveway with a locked gate of ample height. Cyclone gates are easy for watchmen to handle.

WHAT is the condition of *your* plant protection system? Is your plant completely enclosed in sturdy fence? Are vital spots inside the plant given extra protection? We will gladly help you work out your plant protection system as it regards the use of fence. A few repairs may be all that is needed. Perhaps only a few feet of fence or a gate would perfect an almost complete system. Call on us for this help. There's no obligation involved. And, subject to priority restrictions, we will do all we can to help you get the fence you need.

CYCLONE FENCE DIVISION
(AMERICAN STEEL & WIRE COMPANY)
Waukegan, Ill. · Branches in Principal Cities
United States Steel Export Company, New York

CYCLONE FENCE

UNITED STATES STEEL

32-Page Book on Fence



Send for our free book that tells all about fence. Crammed full of facts, specifications and illustrations. Shows 14 types—for home, school, playground, and business. Whether you need a few feet of fence or 10 miles of it, you need this book. Buy no fence until you see what Cyclone has to offer.

CYCLONE FENCE
Waukegan, Ill., DEPT. 542
Please mail me, without obligation, a copy of "Your Fence—How to Choose It—How to Use It." I am interested in fencing: ☐ Industrial; ☐ Estate; ☐ Playground; ☐ Residence; ☐ School.
Approximately _____ feet.

Name _____

Address _____

City _____ State _____

Who'll Tend Your Shop Tomorrow?

(Continued from page 42)

workers, young and elderly persons, women and those who are now self-employed.

The inventory of man power which the Government is now recording by use of Selective Service forms is expected to be an important factor in transferring men from peace-time to war-time jobs. When it is completed, the Government will have a record of the past experience of every man between 20 and 65.

Each registrant will have five days to make out his form and check his experience on a list of 225 occupations. The local employment service office will classify the return cards and examine them for workers whose experience indicates skill that might be used in a war production plant. Any such persons will be personally interviewed and offered a war production job even though it may be in another part of the country.

But there will not be enough skilled workers to fill the need. New ones must be trained. Candidates for training are coming from all walks of life—particularly those businesses that have been hard hit by rationing. One-half the men in a West Coast automobile assembly plant were referred to a shipyard by the Employment Service. When an automobile distributing company in an eastern city laid off its salesmen, the majority began training for defense work even though they were past middle age and had spent their entire life in the automotive industry.

Many men who operate a one-man business—such as repair specialists, plumbers, cobblers and the like—are closing up for the duration and taking training for a defense job where they won't be handicapped by priorities or lack of rubber tires.

Women are becoming an increasingly potent factor, not only as substitutes for men in non-essential industries, but front line workers in arsenals and airplane factories. In 1941 there were 13,500,000 women in the country's labor force including 700,000 in agriculture. About 1,200,000 of them were in war production. By the end of 1942 there will probably be 15,300,000 in all industry and 4,500,000 of them will be working on defense products. In aviation alone, out of 1,000,000 persons at work by December, 1942, it is estimated that from 200,000 to 300,000 will be women. In England it is reported that 60 per cent of all aviation workers are women.

Women have been found particularly adaptable to many phases of defense work. In mechanical operations personnel men report that female help is being successfully trained in such trades as sheet metal workers, welders, riveters, assemblers and inspectors. A Bridgeport operator reports that he trained a 45 year old housewife to spot weld in 10 days. A shoe manufacturer reports that, for the first time, women are successfully operating heavy machines for shoe sole stitching.

There is a possibility that thousands of women may go to the railroads, where male stenographers, ticket agents, and clerks are still in vogue. The rails could also use more women as telegraphers, most of whom do their business nowadays by telephone.

In towns and plants where no defense work is visible, women will become increasingly vital to business operations. In the last war they served as street car

★ ★ ★

WASHINGTON CALLING GEORGE

By BERTON BRALEY

(NEWS ITEM:—The Government is Urging Greater Production on Farm and in Factory and Expects Every Citizen to Make Great Sacrifices.)

I SING of the fall guy who labors
At desk or at counter or forge,
That butt of his wisenheim neighbors,
That goat of the chiselers, George!

The smarties are clever at
Letting George do it,
They're snickering ever at
How he hops to it.
"George" they say, smirking
While passing the buck,
"Is a hard-working,
Dumb, good-natured cluck!"

And yet, when their projects go haywire
And all of their fingers are thumbs,
They send out a night or a day wire,
They keep paging George till he comes;

George, the big, pliable,
Soft-hearted slob,
Faithful, reliable,
Handles the job.

He slams through the boulders
That clutter the road,
He bears on his shoulders
A seven-man load.
When Deeds are required
In office or shop,
George, dogged, dog-tired,
Plods over the top!

George, who is sendable
Anywhere, when
Jobs need dependable,
Trustable men—
George'll slog through it
And it's a wise plan
"Letting George do it"
When no one else can!

George at the gun and
The lathe and the forge
Gets the thing done—and
Thank Heaven for George!

★ ★ ★



Research is showing many manufacturers how to use their new wartime plant capacity for profitable post-war production.

We are designing, building and equipping several important industrial research laboratories for war work now. If you have such a problem, a letter or a phone call to our Cleveland or New York office will get you quick information as to what we are doing for others, and can do for you.

The H.K. Ferguson Co.

ENGINEERS AND BUILDERS

CLEVELAND NEW YORK



HOW MANY OF YOUR MEN ARE ABSENT EACH DAY?

Group Wash Fixtures Reduce These Man-Day Losses

Lost man-hours caused by absentees mean lost production which is gone forever,—a loss that very seriously retards our war effort.

Physicians say that one major cause of lost hours is Dermatitis (skin affection) which however can be practically eliminated by proper and regular washing.

Most of our leading industries guard employee health with sanitary Bradley "Multiple-person" Washfountains. Bradleys serve 8 to 10 persons simultaneously—supplying each with clean, sanitary running water from a central sprayhead.



One of American Can Co. plant washrooms equipped with sanitary Bradley Washfountains.

Bradleys save time and space, and reduce water consumption . . . They cut installation costs, too, because an 8 to 10-person Washfountain requires but one set of piping connections, 1/8 to 1/10 as many as required for 8 to 10 "single person" wash basins.

Our Washroom Consultants are ready to give you details and make helpful suggestions. "Washroom Plan Book" will be mailed on request. BRADLEY WASHFOUNTAIN CO., 2205 West Michigan Street, Milwaukee, Wisconsin.

BRADLEY *washfountains*



The sprayhead serves clean *running* water to each person—the bowl is self-flushing to prevent collection of water and contamination.

conductors, elevator operators and barbers. It was not uncommon to see them on the docks in New York where they operated industrial trucks. Married women who graduated from the working class long ago are coming back to replace waitresses, clerks and typists who have gone to the arsenal, filling station or light delivery truck. In some places they have already pooled their children under the care of child nurses.

If this country has to go as far as England or Germany, women will make up the dominant force in labor groups where they have been seldom seen, such as radio manufacture and repair which is now almost exclusively in the hands of English women.

However, registration of women for war work at present seems impractical. Disturbance and unrest followed English registration because jobs were not ready. When women can be used for war work it seems best to confine recruiting to local areas where they are needed. Bringing in outsiders adds to an already overburdened housing situation.

The business man who has no part of a government contract will likely have more headaches over labor supply than the man who is making military equipment, but many of them are preparing for the future right now. Employers of truck drivers know that their men are in heavy demand. If the Army doesn't take them, public utilities will. Pressed by loss of inducted bus drivers, while traffic volume swells, utilities in defense areas are spending thousands of advertising dollars to get drivers. Drivers of delivery and heavy duty trucks in nearby communities are tempted by the higher wages. Local businesses are left short of drivers. In one southern locality an oil company and a soft drink company met the situation by making a deal whereby the drivers would alternate on each other's trucks.

The same principle can be applied to many types of industry as it has been in Rochester, N. Y., where some of the largest firms pool their labor. Under their plan, in operation for years, workers transfer from one plant to another in alternate slack and rush periods.

The small manufacturer who has not yet, but hopes to get, a government contract is in an uncomfortable position. He is in danger of losing skilled workers either to the Army or a defense plant. If his men are eligible for military service, he will have to talk fast to his local board to convince them he is reasonably sure of conversion to defense operations and that no one can be trained to take the place of particularly skilled operators.

There is little enthusiasm for labor conscription, but, if present plans for labor mobilization fall down, it may be necessary. Raiding of each other's workers by defense plants may bring it on. Excessive volunteering of men needed in vital production is another danger spot. Locating and freezing each worker on the spot where he is most valuable is the goal of the Selective Service Board. If that can be done on an orderly and voluntary basis there will be no need for labor conscription.



"Hey, buddy, do you want to help with the National Defense Program?"

Wanted: A Labor Policy

(Continued from page 52)

ioned common sense and fair dealing.

Equally uncertain and vague are the powers and functions lawfully delegated to these boards. The legislative branch has abdicated so many of its functions to administrative boards that "the intent of Congress" is now the point of law most hotly debated before the courts. Frequently, too, when the administrative or judicial boards are the creation of Executive order, the still more difficult enigma arises: "What was the intent of the President?"

In his notable speech in New York, W. M. Leiserson, member of the N.L.R.B., said "there is no essential difference between the former Defense Mediation Board and the present War Labor Board. One was a mediation board that arbitrated; the other is an arbitration board that mediates." The new board, he suggested, faces ahead the same stormy weather that wrecked its predecessor.

The laws are uncertain

THE more uncertain the status in law of an administrative unit of government the greater becomes the risk of capricious and arbitrary actions by its administrators. This truth is at the very root of all the abuses committed by the N.L.R.B., as revealed in the Smith Committee investigation. Failure of the Act to prescribe clearly the method to be followed in carrying out the clause providing that workers shall be protected in their right to "bargain collectively through agents of their own choosing" has alone been the cause of endless bickering and bitterness over representation. But the record of seven years seems to prove that this and other ambiguities have worked to the advantage of compulsory unionism.

Strong grounds can be cited for the belief that some of these ambiguities were deliberate. It is not for nothing that expert drafters of statutes, like Ben Cohen and Leon Keyserling, have plied their trade in Washington. A statute that implies more than it says has a far better chance of passage through Congress than one which says all it means. The rest may be left to the administrators.

In the area of labor relations, then, the only policy followed is that there is no policy. Every case is decided "on its own merits," with little regard to a defined policy or the guidance even of precedent. The result is that each decision decides nothing but that particular dispute. In some instances one degree of "union security" is granted and in others something else.

Because no clearly demarcated policy or principle is pursued, the N.W.L.B. rules that the Aluminum Company of America must pay seven cents an hour more to its employees. It is a big company and therefore considered able to pay that much. If, as a result of this

HOW I RETIRED ON A LIFE INCOME OF $150 A MONTH



To men of 40 who want to retire in 15 years

"FIFTEEN years ago I made a discovery that changed my life. I believe it will interest you.

"At that time, I was worried about myself and my future. I seemed to be living in a circle. I used to dream of being able to relax and enjoy life, without money worries. I longed for security.

"But dreams like that seemed hopeless. I wasn't rich. I probably never would be. Like millions of others, I would simply live and work and die—spend a lifetime making ends meet.

"But that was 15 years ago. Now I have retired on a life income. I have no business worries—my security is guaranteed. I can work or play, as I like. Each month the postman hands me a check for $150 and I know that I will receive another $150 every month as long as I live.

Here's What Happened

"My friends are envious. They want to know how it was possible. How, without being rich, I ever managed to retire on a life income. The answer is simple: When I was 40, I discovered the Phoenix Mutual Retirement Income Plan.

"The minute I read about this Plan I realized it was just what I needed. It showed me how to get an income for life beginning in 15 years. It showed me how to get immediate protection for my family in case I did not live until then. It even included a disability income for me if, before age 55, total disability stopped my earning power for six months or more.

"Best of all, the cost of this Plan was within reason. In fact, the Plan called for far less money than ordinary investment methods would require to get the same income.

"Today, at the comparatively early age of 55, I have the things I want—life-long security and freedom to do as I please. I can laugh at the worries that used to haunt me. With an income of $150 guaranteed me for life, I can be sure of comfort and happiness in the years ahead."

This story is typical. Wouldn't you like to make sure of your own future? Wouldn't you like to find out, for yourself, how the Phoenix Mutual Plan works? You can get the facts, without obligation, by sending for the booklet offered below.

Send for Free Booklet

Send the coupon and you will receive, by mail and without charge, a booklet which tells about the Phoenix Mutual Plan and how to qualify for it. This booklet explains how to get a life income of $10 to $200 a month or more, starting at age 55, 60, 65 or 70. It shows how the Plan can protect you against emergencies, and how you can fit the Plan to your own needs. Don't delay. Don't put it off. Send the coupon for your copy *now*.

ESTABLISHED 1851

PHOENIX MUTUAL

Retirement Income Plan

GUARANTEES YOUR FUTURE



PHOENIX MUTUAL LIFE INSURANCE COMPANY
528 Elm St., Hartford, Conn.

Please mail me, without cost or obligation, your 32-page illustrated book showing how to get a guaranteed income for life, beginning at 55, 60, 65, or 70.

Name_____

Date of Birth_____

Business Address_____

Home Address_____

Copr. 1942, by Phoenix Mutual Life Insurance Company

victory for the union, another smaller company is brought before the Board a lesser wage might be decreed, according to the judgment of a majority of its members. There is no yardstick, and so the southern wage differential question is still as far as ever from being settled.

It follows that the union leaders are encouraged to agitate disputes that will bring them before the N.W.L.B. or the N.L.R.B. Since decisions establish no precedents, they can get a hearing on almost any kind of case. They have nothing to lose and they may obtain another concession.

A war of infiltration

ALL this dovetails perfectly with the C.I.O. war of attrition. The tactics of its chiefs are to advance all along the industrial front by a steady and remorseless process of infiltration not unlike the invasion tactics of German and Japanese military minds.

Wherever a new concession is wrung from management an effort is made to use it as a precedent for all units of the same industry. If one board is not compliant, they try another. A rebuff means merely a temporary setback, while each favorable interpretation immediately sets a new goal all along the line. Management, fighting on the defensive, is always at a heavy disadvantage in negotiation. This is well illustrated by the current demands of the S.W.O.C. on "little steel" for $1 a day wage increase and the closed shop. Steel men say this is an old horse-trading trick. At the proper moment the S.W.O.C. strategists will offer generously to compromise by waiving one or the other demand.

This freedom from the hampering restrictions of policy, as we see it in the field of labor relations, is but one thread in a much broader design that can be seen running through the whole pattern of procedure in Washington. It is the Trojan Horse strategy in its essence.

The same philosophy has been extended into an academic dogma that denies there are valid principles in any zone of activity or knowledge. A school of "Non-Aristotelians" has grown up in recent years with a plan to rewrite all the sciences and liquidate the principles or truths expounded by Aristotle, Euclid, Newton and every thinker down to Einstein. The intellectual protagonist of this new enlightenment as it concerns government is Thurman Arnold, Assistant Attorney General. Relatively few citizens interested in the labor problem have read his "Folklore of Capitalism" and not many of its readers appreciated just what he was driving at.

Arnold was not joshing when he ridiculed the conception that principles, not men, should govern; or when he argued that only through freedom from inconvenient principles can "the practical tasks of government be performed." His advice to the social reformer to avoid defining his terms and to "try to choose words and illustrations which will arouse the proper mental associations with his readers" evinced a sense of ethics worthy of Machiavelli.

"If he doesn't succeed with these," Arnold concluded, "he should try others. If he ever is led into an attempt at definition he is lost."

The sit-down strike, said Arnold, was "a fascinating struggle to develop labor unity and leadership in this country." How strikes should be conducted was a question that had "no validity whatever" to "a realist observing the struggle without the normal preconceptions of either of the opposing organizations." Herein was pragmatic sanction for every excess committed in the five years since Arnold's book appeared.

Sidney Hillman, who probably to a greater degree than anyone else represents what the administration calls a labor policy, is an opportunist in the light of his own actions and words.

"I am for Roosevelt," he once said, "because Roosevelt is not guided by any social philosophy. Leaders must never be hampered by any political or social theories."

In a still broader sense this new freedom from principles marks the line that distinguishes a republic from a democracy. In both, the people are the ultimate source of authority, but in a republic the people's representatives act within the bounds of constitutional checks and balances. In a pure democracy no checks restrain the will of any temporary majority. This unrestrained democratic majority decides every issue "on its own merits," without the guidance of written policy, precedents or principles.

One of the most discerning observers of Nazi Germany, Stephen H. Roberts, in his "The House That Hitler Built," made some very suggestive disclosures of how the liberties of a people are affected when law is made a political instrument not subject to the old guiding principles of jurisprudence.

The Nazi courts adopted Hitler's idea that "the motives and aims of offenders should be taken into account." The same crime rated a different punishment according as it was committed by a Black Shirt or a Socialist. Public opinion as to what is right and wrong became the chief criterion in place of the law. And since the only public opinion with any standing in Germany since 1933 has been that of the ruling National Socialist Party, this really means the function of the courts is to enforce the party creed. The whole legal system is nothing but a tool of the Hitler Administration. In fact, Dr. Frank, the Reich law leader, told the Congress of Jurists that every judge should ask himself this question: "How would the Fuhrer judge in my place?"

What can be done about all this?

This is the answer of a disillusioned but still hopeful business executive on a recent visit to Washington:

We should return to first principles—to the policy of having a policy, openly arrived at, frankly avowed, set down in black and white and honestly followed.

This would be an improvement, from the standpoint of efficiency, whatever the policy so adopted. If that policy included the unassailable position that the emergency of war should not be used either to build up or tear down any



"IT'S DIVIDEND TIME AGAIN"

EVERY day of the year, many Hardware Mutuals policyholders receive this welcome message—telling them of savings of 20% to 40% in the cost of their fire insurance, 20% to 25% of casualty insurance costs . . . They're SAFE savings, too, paid by companies operating in every state, with offices coast to coast, and adjusters or attorneys servicing every county. Write for our booklet "Reducing Your Expenses."

Hardware Mutuals

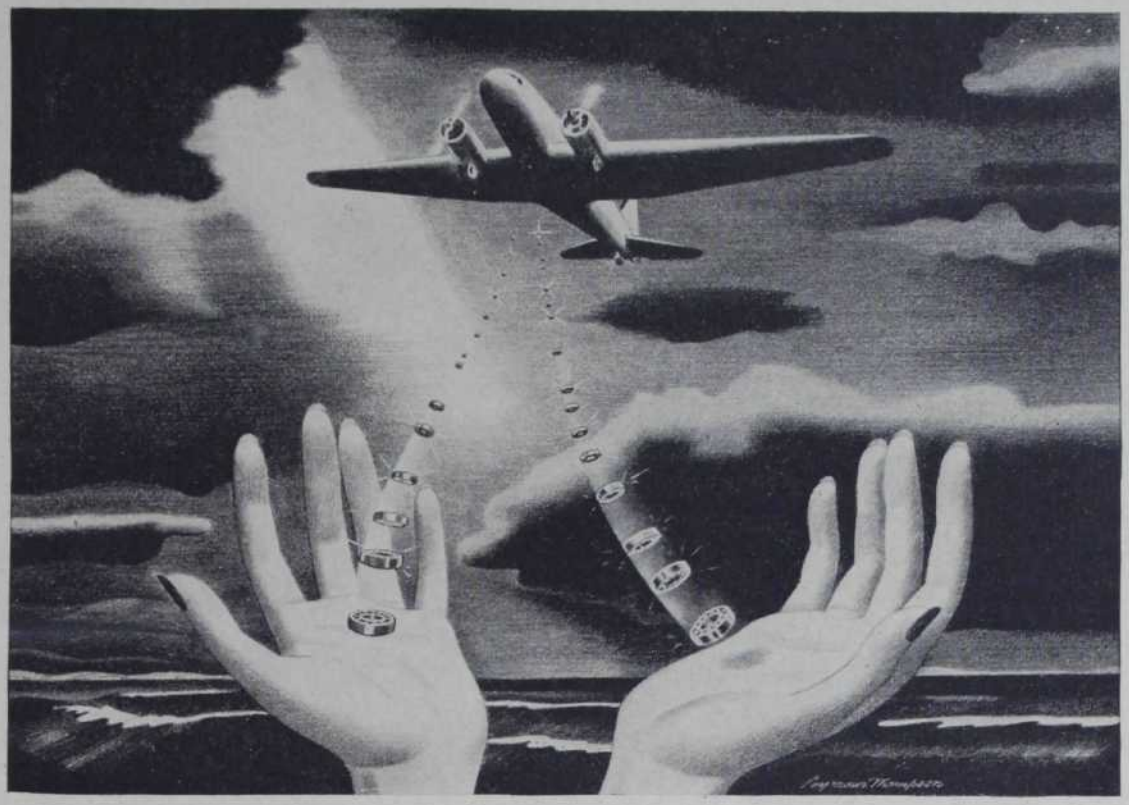
FEDERATED HARDWARE MUTUALS

Hardware Dealers Mutual Fire Insurance Company, Home Office, Stevens Point, Wisconsin
Minnesota Implement Mutual Fire Insurance Company, Home Office, Owatonna, Minnesota

HARDWARE MUTUAL CASUALTY COMPANY

Home Office, Stevens Point, Wisconsin

AUTO INSURANCE...BURGLARY...FIRE...GENERAL LIABILITY
PLATE GLASS...INLAND MARINE...WORKMEN'S COMPENSATION



Jewels FOR THE MISTRESS OF THE SKIES

OF THE MANY PARTS that go into a plane, none are more important than the steel "jewels" that form bearings. A few years ago these tiny units were made almost entirely in Switzerland. Today, thanks to the patriotic willingness of an auto manufacturer and a precision toolist, the U. S. A. produces its own fine "jewels" in abundant quantities. Because of the small size of these vital parts, women's fingers prove more proficient in fashioning them. Thus, through the coordination of talent and the blending of energies, INDUSTRIAL TEAMWORK becomes our most indispensable product. Insurance, the industry that protects other industries, helps to keep INDUSTRIAL TEAMWORK alert!

INSURANCE AIDS INDUSTRIAL TEAMWORK



It is about as necessary to industry as bearings are to machinery. Insurance provides a backlog of financial strength when unexpected mishap causes loss. But it is always on guard against these occurrences and often successfully eliminates the danger of hazard before it strikes. In all industry, insurance reserve dollars are widely invested and become bone and muscle to the ramparts of production.

FIRE · AUTOMOBILE · MARINE INSURANCE

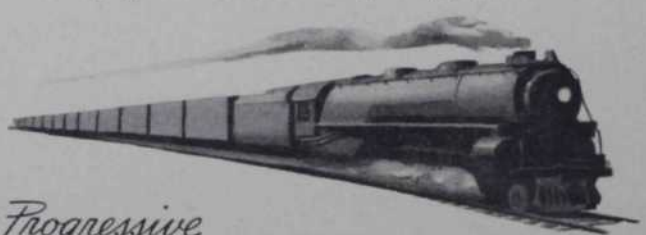
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Insurance Company
NEW YORK



WE'LL
Keep 'em rolling
TO HELP "KEEP 'EM FLYING"

Materials—and still more materials—for planes, tanks, guns must be delivered to a multitude of industrial plants. Troops must be transported to military camps.

It's an important job the railroads are doing today and Union Pacific is proud to do its share. A fleet of gigantic locomotives—largest ever built—haul vast quantities of vital war materials and completed armament over the Strategic Middle Route, planned by Abraham Lincoln to connect the East with the West. All of our facilities plus thousands of experienced Union Pacific employees are on the job for Uncle Sam day and night. *We're keeping 'em rolling to "keep 'em flying."*



The Progressive
UNION PACIFIC RAILROAD
The Strategic Middle Route

union, it would create a new confidence. Most people want the class war adjourned to prosecute the Axis war. After that, it may not be too much to hope that workers themselves will see that collective bludgeoning is not in their interest and can never succeed.

A policy of preserving the *status quo ante bellum* would have a notable precedent in the action of the Wilson Administration during the first World War. At that time also we had a National War Labor Board. It declared in simple language, without a weasel word, that, during the war, there should be no strikes or lockouts, no interference with collective bargaining, no discharge of workers for legitimate union activities, no coercive measures by unions toward employers or non-union workers, and that the continuance of open-shop conditions in any plant should not be deemed a grievance subject to consideration by the Board. This last clause definitely outlawed the big issue that killed the N.D.M.B. and now threatens the N.W.L.B.

A union is not government

ON THIS touchy but extremely important closed shop question there is a much older precedent that seems as valid a guide today as when it was stated in 1902. At that time, in a report to President Theodore Roosevelt, the Anthracite Coal Commission took cognizance of the claim by union spokesmen that no worker has a right to remain aloof from a union supported by a majority in a particular industrial unit, any more than a citizen may refuse compliance with a public policy adopted by majority decision.

This contention the Commission answered by denying emphatically that any such analogy existed. Government created by organic law may not be compared with a voluntary social organization. The latter—in this case a union—cannot make rules that contravene the laws of the land. When it sets itself up to do so it becomes a government within a government. That is an unhealthy condition, in a social as well as an anatomic sense. Cancer is defined by medical men as a group of cells which separate themselves from the rest of the body to start a growth independent of the regular human organism and fatally at war with it.

These two precedents constitute an enlightened and liberal labor policy. They have been written substantially into two bills passed by the House of Representatives, both by large majorities. One bill is the House amendments to the Wagner Act, voted by the 76th Congress, and the other is the more recent Smith bill regulating labor union activities. The Senate has not concurred or even held hearings on either measure. The attention of the country was diverted from the Smith bill when the President called his War Labor Conference immediately after its passage.

The enactment of these two bills or some reasonable equivalent, it is claimed, would restore principles in labor relations in the place long occupied by expediency.

Make Sidewalk Traffic STOP with a Pittco Front



A PITTCO Front gives you the edge that makes shoppers choose your store instead of your competitors'. Its shining, colorful, easy-to-keep-clean surfaces of Carrara and Plate Glass get the kind of attention that means more customers. If the quality and selection of your merchandise, the courtesy of your attendants, and the fair dealing of your management live up to the promise of your handsome Pittco Front—you'll have a business to be proud of.

Merchants of all kinds over the country write us of putting on additional clerks, of increasing their stock, of enlarging store space after a Pittco Store Front modernization—and of paying for their new Store Front in a surprisingly short time out of the extra profits it brought. Send the coupon for our free, illustrated Store Front Book. Read for yourself what these merchants say, and see the Pittco Fronts they write about.

When you build, we recommend that you consult an architect to make sure of an economical, well-planned job. Our experts will cooperate with him gladly in working out a Pittco Front to suit your individual needs. If you wish, you can pay for your Pittco Store Front on the Pittsburgh Time-Payment Plan—just 20% down and the balance in regular payments. A similar plan can usually be arranged satisfactorily with the cooperation of local banks.

"THE BEST-LOOKING STORE IN TOWN." *A reputation like that puts money in the bank. And a handsome new Pittco Front like this one in Wichita, Kans., goes a long way toward making it said of your store. Here wine, beige, forest green and ivory Carrara, Polished Plate Glass, Pittsburgh Mirrors and Herculite Glass Doors beckon shoppers inside. Architects: Bloomgarten & Frohwerk.*

PITTCO STORE FRONTS
PITTSBURGH PLATE GLASS COMPANY
"PITTSBURGH" stands for Quality Glass and Paint

Pittsburgh Plate Glass Company
2227-2 Grant Building, Pittsburgh, Pa.

Please send me, without obligation, your new, illustrated booklet, "Pittco Store Fronts—and Their Influence on Retail Sales."

Name_____

Street_____

City_____ State_____

"—And Become Citizens"

(Continued from page 44)

what kind of men do you want as your proxies on that Board?

It is up to you. This is the year, now is the appointed time. Do your beefing now.

We have heard much of "liberals" in recent years, even of those who are liberal with your money. But nail this down.

Nothing that diminishes the prestige and subtracts from the power of Congress is really liberal. When the Reichstag voted away its power, the shadow of Hitler began to lengthen across the world.

In B. C. 63 Rome was shaken to its foundations by the conspiracy of Catiline to overthrow the Republic. It was then that Cato made his magnificent reply to Caesar, "Now I conjure you by the immortal gods . . . rouse for once out of your lethargy and *take on you the defense of the State.*"

I do not say the American people are asleep. On the contrary, they are probably more alert than the people of any other nation.

But it is true that we have been asleep with reference to Congress. We have come to regard it as the poor relation of the White House, the vermiform appendix of the Constitution.

Do you deny it? I can prove it. But you can also, to yourself. These questions will suffice:

Do you know your Congressman's name? How long has he served? What committees is he on? Do you recognize him on the street? Have you ever talked with him about legislation? Have you ever written him a letter?

Watch out for Congress

DURING the past year you were interested in this and that important bill in Washington. Some you favored, some you opposed. How did your Congressman and Senator vote on these bills? Do you know? No, you don't know.

Out of a dozen of what you consider the most important bills, have you ever indexed your director's votes in the Board Meeting at Washington? Did he vote the way you wanted him to on, say, eight or nine out of 12? Or only on four or three—or none? Did he, in fact, represent *you?*

Grade yourself on this examination. Did you pass?

Now, I will tell you how I know John Public is not "on the alert" to Congress. During my eight years in Washington I made it my business, in driving through my *own* district, to ask, "Who is your Congressman?" "Well, now, let me see. Seems like it is a guy named H—— (whom I defeated) or no, B—— (many years deceased). Say, Tom, this man wants to know who's our Congressman."

This is a sovereign remedy for pride that puffeth up.

I recommend it to all Congressmen, but it proves my point.

I wish Dr. Gallup would take a poll some day and ask you, Mr. Voter, who is your Congressman, your two Senators, your Governor, your State Senator and State Representative. The result would startle. For these men, unknown to most of you, have the entire lawmaking power over your life, your liberty, your property and the future of your children.

You may not care about yourself. But how about your children? If they are under 21 they cannot vote. Unless you vote for them on matters that concern their future, they might as well live on the Rhine.

Fathers and mothers sweat and slave to leave a little something for their children. Some leave insurance, a trust fund, national defense bonds, a farm, a home or whatnot.

What will it or anything be worth when you are gone unless you leave your children a free land and a solvent country?

How many mothers pay as much attention to the qualifications of their Congressman as they do to their cook or laundress?

Congress is the last bastion of freedom. Your country is in the grip of a huge bureaucracy.

You may never live to see the Supreme Court declare another act unconstitutional.

Congress can stop abuses

BUT Congress remains. And the Constitution still insures your having nonpostponable elections every two years. (In England Parliament has extended its tenure indefinitely by its own act.) Congress, through its ultimate control over the public purse, can put an end to any evil thing in Washington. If it refuses to appropriate funds, the evil thing must die. Hence, we still have, despite the cynics, not only the form, but the very substance of freedom in our hands.

So long as Congress keeps the power of the purse, and so long as the people keep the power to elect a Congress that will exercise this power, you can have any kind of government you want, and have it now, in 1942. You don't have to wait until 1944 or when the war is over.

The revolt against pensions for Congressmen proves that. The people spoke, and Congress heard. It is one of the best things that has happened in a blue moon. However, to keep things in perspective, Arthurdale, W. Va., the first fruit of the Tugwellian era, cost enough to pay congressional pensions for 38 years. And Passamaquoddy, the tireless tide toy, would pay these pensions for 430 years. It was not Congress that blew in your dough.

It is important to realize that totalitarianism is constantly at work to destroy Congress, or to by-pass it. These

What Is Adequate?

Each man must determine for himself how much life insurance he requires.

The safest measure is the extent of his family's needs if his earnings should be stopped forever.

May we help you arrange your program?



The Prudential Insurance Company of America

Home Office, NEWARK, N. J.

Utopians want a free hand to "spend and tax and elect."

For example, Tugwell is now trying to get $175,000,000 to socialize Puerto Rico. He has recently stated that the "probable unsympathetic attitude of Congress made it seem desirable to depend, at least in the beginning, on the generosity of administrative agencies, rather than on argument before congressional committees"!

We are all concerned about the future of freedom. I do not think it is likely that Congress will be destroyed by a *coup d'etat*. It is more likely that it will shrivel up through your neglect until it no longer respects itself or is respected, and the people, with hats in hand, will then "most humbly beseech" the bureaucrats for the favor of their own money. The people are letting the reins of government slip from their hands.

They have been doing that all over the world.

Not a partisan matter

I AM not talking party politics. Republican and Democrat, we got along pretty well together for a century and more. We have had good times, bad times, peace, war and victory under each of these great parties. But a new bloc is developing which knows nothing of the covered wagon, but much of Moscow and Berlin.

Against these alien-hearted men the Lincoln Republicans and the Jeffersonian Democrats must unite. As in the time of General Washington, put only Americans on guard.

Republicans of the northern states, wipe out the last lingering trace of the Civil War. Realize that you in the North and the Democrats of the South are fellow Americans.

You must work together in these desperate days.

Nor do I suggest that any sitting Congressman or Senator be defeated. If he is a *man*, it is your job to keep him from being defeated. Powerful forces are gunning for men. Men are not wanted: rubber stamps are in demand.

On the other hand, if your Congressman or Senator has shown that you cannot depend on him to make a MacArthur stand for freedom, this is your chance. Not only in Australia, in India and Siberia, in Zmeingorski and Vadakushimsk, but in Washington, D. C., do we meet men who defend us against "all enemies, foreign and domestic."

Don't wait until the fall election. If you do, you may have nothing but a choice between two evils. In the primaries now under way support that strong man you now have. Hold up his hands.

But if you have no strong man, make it your business to nominate on both tickets the strongest man in your district whom you can draft. Go get him. Make him run.

Send your strongest to Congress. Fifty more strong men than we now have on Capitol Hill, and how confidence in the future would revive!

Attend political rallies, stand up in meeting and respectfully ask questions. Send delegations to the candidate's office. Ask him to come to your office. Ask the newspapers to publish his vote on important bills if he is an incumbent seeking reelection. Attend the meetings of your party organization. Become a precinct worker. Know your county chairman. Become important to the candidate. Don't be a political illiterate. As Theodore Roosevelt used to say, "Join the ruling class." If you have stockholders—and there are 15,000,000 of them who ought to take an interest in the future of your business—suggest to them that this is the time to put in the first team. Leave the scrubs on the bench.

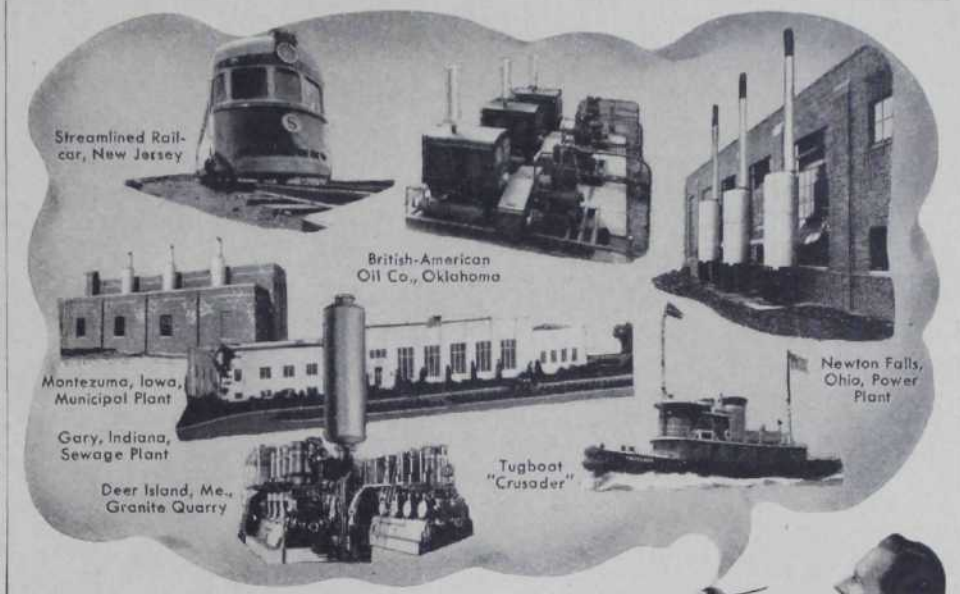
After all, unless you drafted him, what is he to you? He is an applicant for a job, one of two or more. If you are a business man or a farmer, remember that your Congressman is the *most important man you will hire this year.*

Ask him to show you his credentials. Ask him: "Do you believe the bigger the national debt, the better off we are? If not, what do you propose to do about it? What did you do about it?"

Do you, Mr. Candidate, believe it is our duty to finance the whole world when this war is over? Do you believe that every desirable social service reaches a limit as to capacity to pay? Where do you think that limit is?

Do you believe in the right of every American to work without being forced to pay tribute to anybody for that right? How do you propose to protect it?

Do you believe labor unions should be democratically controlled by their own members with secret ballots on all im-



Diesel Engines with Quiet Exhausts are NO PIPE DREAM

Once upon a time Diesel engines meant Diesel exhaust noise, and exhaust noise complaints were common from persons living or working near these Diesel plants.

All this is now a thing of the past. Diesel engine owners are operating their engines, today, in residential districts, office buildings, and hotels. By equipping their engines with Burgess Exhaust Snubbers, they have done away with exhaust noise and all exhaust noise complaints.

The plants, shown above, are just a few of the many Burgess Snubber installations where Diesel engines are running without creating an exhaust noise nuisance. Burgess Snubbers—operating on the patented snubbing principle—have helped to popularize the use of Diesel engines in every kind of service. Any Diesel engine, anywhere, can be run without objectionable exhaust noise if it is equipped with a Burgess Exhaust Snubber. Burgess Battery Company, Acoustic Division, 2823-F West Roscoe St., Chicago, Ill.



Sectional view of Burgess STC Series Exhaust Snubber.

Originators of the Patented Snubbing Principle for Quieting Diesel Exhausts

BURGESS DIESEL EXHAUST SNUBBERS

NO BROKEN POINTS



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when the NATION'S BUSINESSMEN go to Washington



RATES FROM $5

THE Carlton

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portant questions? Do you think that they, like corporations, should be prohibited from contributing to political parties?

Do you think Congressmen and Senators should take orders from the White House?

Do you think "the party is always right?" Do you believe in the "party line?"

These are the kind of questions that will winnow out the wheat from the chaff. America is still yours and your children's if only, as an old friend once wrote Thomas Jefferson, "We cease being residents and become citizens."

Fellow citizens, former residents, this is your year.

"Take on you the defense of the State."

How Not to Win the War . . .

To the Editor:

Archibald MacLeish is Librarian of Congress and therefore a scholar. He is Chief of the Office of Facts and Figures and hence must have imagination. He is a poet and he knows which fork to use when he goes out to dinner. He is also some kind of co-ordinator of government press agents, and has announced that he is about to cut down their numbers.

I will make him a small bet that he doesn't do anything of the sort. I believe that he believes he will do it. But he has only been in the government service a short time.

He simply does not know what he is talking about.

It is true that he has good backing. Postmaster General Walker is calling for help. He says the tons of government publications have loaded the postal services beyond endurance. There are angry men in Washington who say that if at the government's order they must write their letters on the backs of used envelopes the government should begin to practice the economy it preaches loudly to the rest of us. The argument is all in favor of the MacLeish aspiration.

But he forgets one thing.

There are 34,000 full time and part time press agents in the government service. Every one of them has a politician behind him. A camel could go through a needle's eye crosswise more easily than a public jobholder can be separated from his pay envelope. The head of one of the bureaus told me that he can run his organization with 20 per cent fewer people. He would get more work done and done better. But he will not even try to cut his force. He knows what would happen.

He'd get his tail feathers burned.

Yet 34,000 press agents are the equal of two divisions of Japanese soldiers.

More than that.

I believe they are doing more injury to the spirit of this country than two divisions of Japs could possibly do.

I do a good deal of standing around on the corners, and I find the people I talk with are by no means complacent. They are angry as the devil. They want to get in and lick the Japs. But—and this may seem contradictory until you think it over—they seem to take a detached attitude. They will pay and suffer and fight gladly—and I mean gladly—but they have been so drenched with government goo and pre-digested thoughts that this seems to some of them like the Administration's war instead of the people's war. They may be getting all the news that can be given them safely, but they do not believe it. They hear tell of small detachments of our forces being sent to far corners to buck up somebody's morale. Their common sense tells them that 2,000 or 3,000 soldiers don't count for much in a war in which armies are measured in millions. If these things are true they want to be told and they want to know why these things are done. They are fed up with an official attitude that suggests the kind lady taking a spoonful of jellied chicken to a sick villager. They don't want any jellied chicken.

If Mr. MacLeish would fire all of the 34,000 press agents, and turn the business of getting and distributing news back to the Associated Press, the United Press and the International News Service—plus the special correspondents—and tell Byron Price to clamp down hard on any jackass reporter who printed dangerous news this country would go to war with a whoop.

But MacLeish can't do anything of the sort. His idea is—just another of those things. —JOHN CARLYLE

PACIFIC GAS AND ELECTRIC CO.

DIVIDEND NOTICE

Common Stock Dividend No. 105

A cash dividend declared by the Board of Directors on March 18, 1942, for the quarter ending March 31, 1942, equal to 2% of its par value, will be paid upon the Common Capital Stock of this Company by check on April 15, 1942, to shareholders of record at the close of business on March 31, 1942. The Transfer Books will not be closed.

D. H. Foote, *Secretary-Treasurer*

San Francisco, California.

Making Our Ships Work Harder

(Continued from page 48)

There are about 30,000,000 tons—10,000 ships—under the flags of the United Nations. Of these, about 6,000 touch American ports each year. Nowadays the outgoing cargo may be worth $3,000,000 in money.

The value in lives and time cannot be computed.

On the average, a ship turns around in eight to ten days in an American port. If that time could be cut—and shipmasters who know their business say that it could be—the computation would run something like this: two days saved on each turn-around; five turn-arounds annually for each ship; 6,000 ships; 60,000 days saved each year. Perhaps that is not accurate.

Everything is being more or less guessed at because the hard facts have never been set up anywhere. But 60,000 days saved works out fairly well with the previous estimate of 400 or 500 voyages which might be saved.

Cargoes should match ships

THESE days are not saved because, among other things:

Cargoes are not ready for ships on arrival. Sometimes cargoes are ready. The American and British shipping authorities have informed themselves on the arrival of ships, their tonnage, their ports of destination.

When the ship is warped into her berth the boss stevedore knows what is her capacity load. As the cargo is shifted out of one hold, other freight is being stowed in another. This is not difficult, say all hands concerned. All it requires is stage management.

The railroads were called on to move 600,000 soldiers, guns, kitchens, bed rolls, grub across the continent not long ago.

They did it. The men were delivered on time, with all their paraphernalia. The same kind of intelligent coordination could put on a dock the cargo to be taken aboard a ship, or a dozen ships. It is done now and then. Admit that it is done with fair regularity. Dockmasters, port authorities, transportation agents, communications chiefs must work together. But that isn't a hard thing to do. American industry and transportation agencies are used to doing that kind of thing.

Every time there is a failure and a ship is not stripped of cargo and freight is not ready a ship is delayed. Perhaps a convoy is delayed. Maybe a battle is lost. If all the cargo a ship can carry is not at hand, the ship should not sail. Ship space is too precious nowadays to permit a ship to move unless she is filled to her hatches. But sometimes what she has taken on board is so desperately needed that she is sent out light. You can hear tales of ships that sailed half full because of the desperate need across



The Nation Over
"We're on the Run"
TO SOLVE YOUR
DRIVE PROBLEMS

Morning, noon and night Morse representatives are on the run with valuable counsel and service on all types of power transmission problems. Power is at a premium. It must not be wasted nor can Industry afford to lose vital production through inefficient drives. Your local Morse representative is well qualified to make practical suggestions on new power transmission drives or on the improvement of old drives. Regardless of your industry or plant size, this reliable service is yours for the asking.

SILENT CHAINS ROLLER CHAINS FLEXIBLE COUPLINGS CLUTCHES

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Let's Get It Done!

AMERICA is out to win the war quickly and completely. The key to victory is *production*. Planes, guns, tanks, ammunition, food, clothing and equipment—these must roll from our plants in hitherto unheard-of quantities.

At the National Chamber's annual meeting in Chicago, America's business and industrial leaders will meet to counsel with each other and with government officials on how best to meet today's challenge.

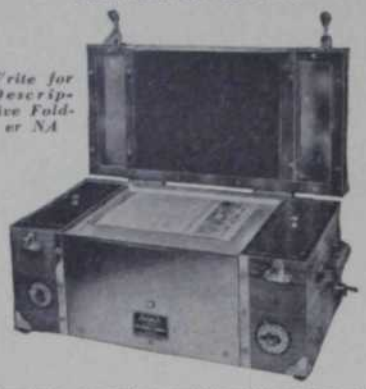
Out of this meeting will come greater unity of action—and a new determination *to get the job done!* Plan now to be there: Stevens Hotel, April 27-30. Full information on request.

Chamber of Commerce of the United States
WASHINGTON, D. C.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

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VOGEL-PETERSON CO.
"The Checkroom People"
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See the WOODSTOCK TYPEWRITER

the sea. Other ships that sailed half full have been called back to complete the lading. That was justified. On the other side, demand had unexpectedly lightened.

New York is fast in loading ships. Four days is perhaps an average. There is plenty of dock room, a wide harbor, lots of tugs, good transportation to the waterside. Even in New York things happen.

A torpedoed British ship came in for repairs. South of 42nd Street in the Hudson River is regarded as safe territory. North of 42nd Street pirates sometimes operate. That ship was stripped of guns, binoculars, raincoats, food, drink, blankets and all the readily packable things aboard. The event made something of a scandal, which was neatly covered by the kind of censorship which operates to protect brass hats. It is referred to only as evidence that even in the port of New York unpleasant events take place.

Delays for late arrivals

BOSTON is—was—a slow port for ships. For a time the Navy Department had charge. Pearl Harbor was fresh in memory. The fuel ships, oil and coal, toiled up the coast day after day. If they could not get in before dark, they had to lie at anchor outside. The Navy would take no chances on having ships torpedoed inside the port. When the harbor was opened at dawn the ships raced in. Those that found berths were lucky. The others lay at anchor and held their breaths.

They might have been unloaded during the night, turned around, and been sent on their way. They might have been unloaded, that is, if the Longshoremen's Union had consented.

But the longshoremen did what they pleased. Too many union leaders have looked on the war as a heaven-sent opportunity. It is not lack of patriotism—many a union of longshoremen has proven that—but a failure to understand.

There was an impasse in Congress over some phase of the lend-lease agreement and some congressman in a position to bear down would only agree to see reason if the new business for Russia was handled through Boston. The longshoremen not only enforced their rules on hours and days, they ruled that no more than 1,800 pounds should be handled in a sling. In other ports the maximum is 2,500 pounds.

"Everything is all right now in Boston," said a shipping master.

This is why it is all right in Boston:

The Army got tired of having ships held for two weeks in Boston. It transferred its business to Philadelphia, where a ship can be turned around in five days. Boston's longshoremen had a rule that no "shape" would be called for ships that failed to get into their berths before one o'clock on Saturday. On one Saturday there was a failure in the radio notification.

Not knowing that ships were to come in, the longshoremen went home. The next day was Sunday. Monday was Washington's Birthday and so the ships were not worked. Not much time lost, perhaps, out of the year. Merely an interesting example. Not, perhaps, as interesting as a delay in another port.

An Ally wanted fighting planes in a hurry. The ports were searched for a ship to carry them. One was found, the few tons of cargo that had been put on board were yanked out, and she was sent to a second port. The ship panted up to her ordained dock. There two wings of a plane awaited her. Nothing else. No fuselage, even, to tie the wings together.

There are delays in getting longshore crews together. In peace-time this is understandable. Ten "shapes" of 30 men each may be called for each day in a port. That would give work to 300 men. But there may be 600 men who want work.

The union devised a scheme to spread the work around. Instead of keeping the men of a "shape" on the job until a ship is unloaded other "shapes" are called for. The bosses make their selection at the beginning of each working day.

In this way every union man has the same chance for work. But in war-time, when no single minute should be wasted, it seems obvious that the loading and unloading should continue without pause.

Longshoremen work a 44 hour week at a minimum of $1.20 an hour. It does not follow that each man works 44 hours each week, because there may be no ships in port. On the other hand a longshoreman's day is from eight to five. His shape may not go to work until four o'clock in the afternoon, but overtime pay at $1.80 an hour starts at five o'clock. If explosives are to be handled the pay is $2.40 an hour and overtime is $3.60.

There are other differentials, such as the 20 per cent addition for handling refrigerated cargoes.

Tankers on the sea's highway

HERE'S another angle.

Recently submarines have been active on the Atlantic Coast. The tankers from Trinidad have followed a sea lane to their American ports. A submarine only has to sit and wait, certain that the hearing devices will soon pick up the beat of a tanker's screws. Then the submarine can pop to the surface, destroy the vessel and submerge again until another victim ploughs along. Tankers are the particular prey of the submarines, because their loss of oil inconveniences the United States more than any other one thing. More even than rubber. Not long ago the crew of a ship which had reached an Atlantic port packed up their dunnage and walked off:

"Why?" asked the port authorities. "You're needed, you know."

The sailors replied that two submarines had come up alongside their ship and looked it over. They compared the inspection to the leisurely observation of a crippled mouse by two cats. Presently the submarines submerged.

"If we'd been a tanker we'd a-been gone," said the sailors. "Anyhow, it's too much for us. We don't mind being torpedoed but when them bleeters come up and look you over before hitting you

it's too much. We're through."

African-bound cargo ships have a habit of refueling at Trinidad. The enemy knows this and waits for the loaded ships, which follow the sea lane.

"If these ships would run out a little farther to sea, they would be fairly safe," shipping men say. "They could easily carry enough oil to run through to their port. But their owners will not let them."

There may be other reasons than economy. Shipping is an odd business. When the submarine sinkings between New York and Trinidad became so frequent some tanker captains proposed that they hole up in safe ports overnight. A survey shows that most of the attacks were made at night or in the early dawn. But it was not quite that simple. For one thing, adequate and safe anchorages are few along the oil lane. A tanker just outside of a harbor or in the mouth of a shallow river would be a target comparable to a sitting duck.

Few American harbors have effective submarine nets and there are not enough patrol ships to watch the harbor gates. Nightly anchorages, even if they were possible, would stretch the normal seven days from Houston to New York to 20 days, and there are not always competent pilots to take a deep-laden vessel into the shallow river mouths.

But something of the kind is likely to be tried.

Speeding up foreign ports

IT SHOULD be made clear that not all of the delays of American cargoes originate in American ports. It is a 60 day run from New York to the Red Sea, for example. A ship can be turned around in New York in four days. In the Red Sea ports, the Arabs took from four to six weeks to unload that ship. The Arabs had always worked at that rate. The American authorities took the matter up with the British. Now the Arabs are doing the turn in seven to ten days and on many of these days they are being bombed. Some American dockwallopers had been sent over to show them how. They spoke no Arabic. They were not even happy in their relations with the British bosses. But they managed to get speed.

The ports in the Persian Gulf, which is the gateway to the Caucasus, are better organized.

Rangoon is no longer to be considered, but there the Chinese labor did very well, by Oriental standards.

Not all of the delays have been all-American. The Dutch wanted a quantity of empty beer bottles to supply their breweries in Java.

A cargo ship was held up at an American port, while the bottles were waited for. No comment.

Sometimes the British handle their affairs admirably. Recently they have been taking delivery of ships at the yards where they are built. The ordinary plan would have been to move those ships to another port for loading. The British load them where they are. A little trouble is involved, of course, in getting the cargoes ready on the docks. Again, no comment.

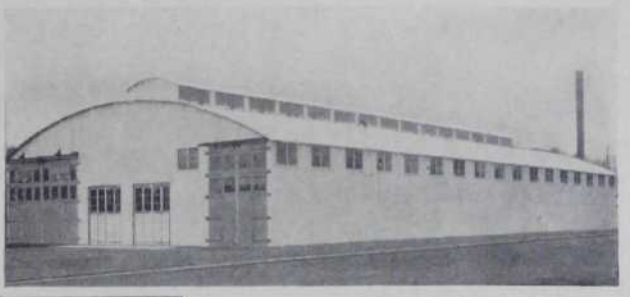
Except, perhaps, this from a veteran shipmaster:

"The British order the cargoes to meet the ships. The U. S. Maritime Commission makes the ships meet the cargo."

At last accounts the overflow on one port's docks had been ordered sent to another. More careful planning—again a shipping man is being quoted—would have sent what became overflow to the second port in the first place. To transfer from the first to the second port involves a somewhat burdensome and costly freighting problem. So the overflow—at last accounts—remains on the first port's docks, where in time it will be efficiently dealt with. The other port has excellent facilities and plenty of longshoremen ready for work. But the docks are not being used even to one-half their potential.

Again this might seem to be an overt criticism of the U. S. Maritime Commission. But the Commission is undermanned. It could use twice as many men as it now employs. Shipping men complain that too many in the U.S.M.C. are ex-Navy men, or business men, or lawyers, or good friends of someone, and that few experienced shipping men are at work. The criticism is not believed to be well founded. The recent pooling of ships and shipping resources by the United States and Great Britain may work out satisfactorily. There remains, of course, the problem of divided command which is not solving our present troubles.

AMERICAN RAILROADS MODERNIZE WITH



BUTLER READY-MADE STEEL BUILDINGS



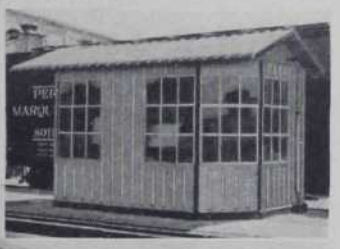
At top—Butler Steel Building 90 ft.x200 ft.x22 ft. housing fruit handling docks. Its interior (see above) is lined and steam heated. Perishable foods are protected from damaging weather.



At left—Butler motor track car and tool house.

Below—Butler railway car scale house.

Below—Butler railway car repair shop, 40 ft.x160 ft.x22 ft. Though not especially designed to tornado specifications, this Butler structure survived in the path of a tornado.





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When you see him at work, though—then's when you realize the difference. For there's a deadly precision in the way he goes about his work. He's on the job a little before starting time; he pays more careful attention to what he's doing; he knows what he's building and for whom he's building it. And that's why he's probably the most dangerous, the "fightingest" enemy the Axis powers have.

For it's men like Pete—who feel the way he feels, who are doing what he is doing—who are manning the machines in America's factories today. And they're turning out the deadliest, most effective array of weapons the world has ever seen.

There are a lot of men like Pete among the 125,000 General Electric employees these days. In their off hours you'll find them acting as air-raid wardens in their communities. You'll find them among the more than 100,000 G-E men and women who, without any fanfare or hurrah-boys, have signed up for U.S. Defense Bonds to the tune of more than $20,000,000 a year. But most important of all, you'll find them on their job—doing what they know best, giving it the best they've got.

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GENERAL ELECTRIC

952-313N1-211

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The victory will "take winning" but it will be won.

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This family security is more important today than ever before. It helps to build national morale, and sound morale among Defense Workers and other home folks, as well as among our fighting forces, is essential to victory. The Equitable Life Assurance Society of the United States provides $7,607,000,000 of life insurance protection.

Life insurance also serves to strengthen the social and economic fabric of the nation through the unceasing flow of benefit payments. Every hour of 1941 The Equitable paid an average of $23,918 in benefits, a total of $209,000,000.

A life insurance institution is also privileged to aid the war effort by investing in U. S. Government securities and by providing capital to industry to produce needed materials. The Equitable recognizes an obligation on behalf of its policyholders to direct a large part of its funds into Government securities. Between the attack on Pearl Harbor and the year-end, The Equitable acquired $88,500,000 of U. S. Government obligations. Supplementing financial aid to Government, The Equitable has $1,491,500,000 at work in industry and business.

By promoting individual thrift, life insurance is supporting the Government's program for reducing non-essential spending and paving the way for increased war production. Equitable agents last year helped 100,000 persons to establish $306,000,000 of individual life insurance protection.

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Just as every Equitable policyholder will make the utmost possible personal contribution toward our war effort, so the management will work and plan with the one objective that transcends all else—helping America to achieve victory.

Thomas I. Parkinson

PRESIDENT

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There is a story behind every life insurance policy . . . a story of things deep down in human hearts. The smile of a baby . . . the tender glow in the heart of a mother . . . the pride of a father. In reality, these human things are as much a part of the annual report of a great life insurance institution as an accounting of the stewardship of millions of dollars of policyholder funds.

"Your Policy," annual report of The Equitable Society, endeavors to capture some of these human things. It also contains practical illustrations of how best to use your present insurance. You may obtain a copy from any Equitable agent or the Society's home office. A copy is being mailed to all policyholders.

SUMMARY OF ANNUAL STATEMENT FILED WITH NEW YORK INSURANCE DEPARTMENT

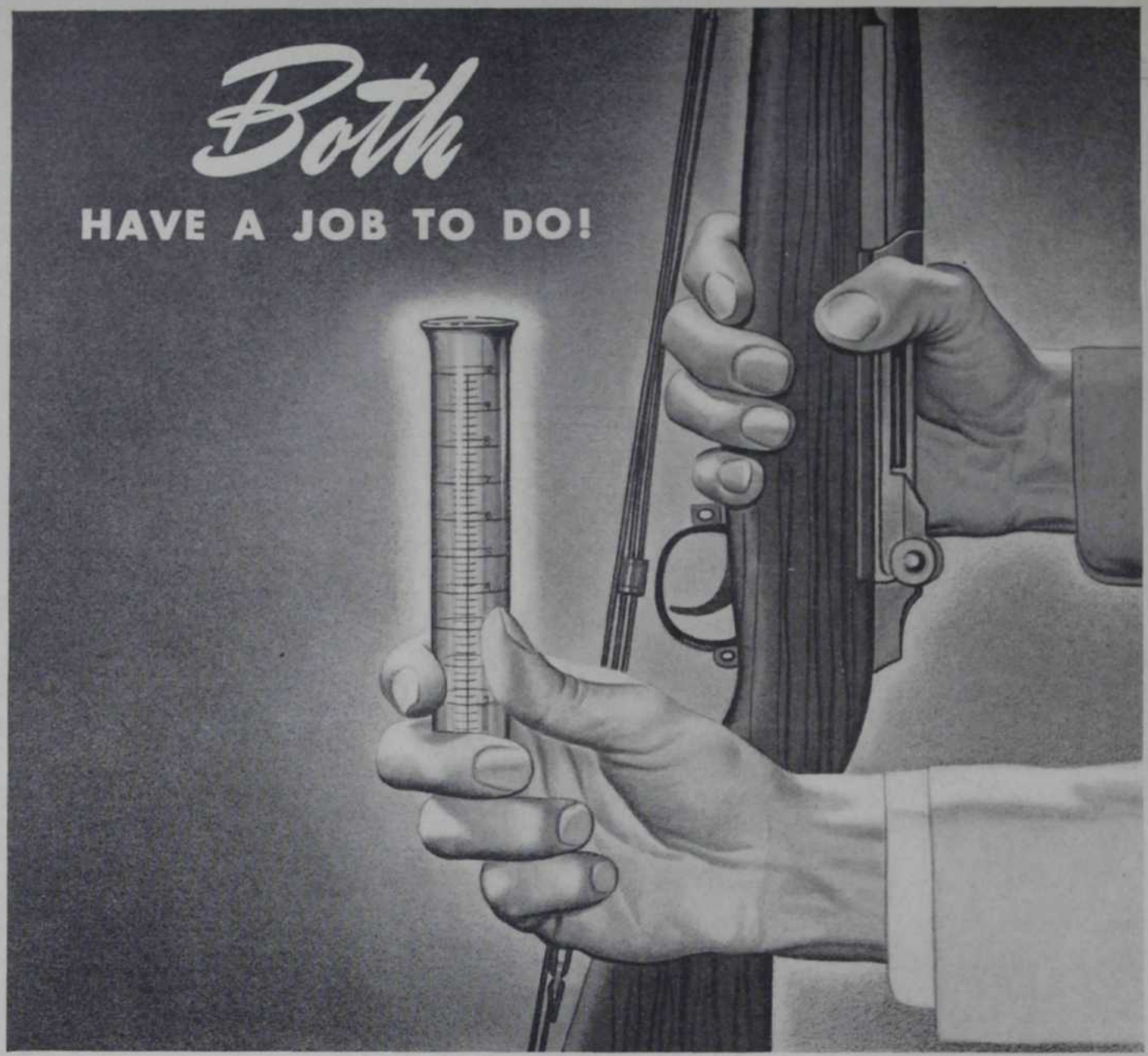
ASSETS	December 31, 1941
Cash*	$ 82,957,111
U. S. Government Obligations†	407,120,949
Public Utility, Railroad, Industrial and other Bonds†	1,450,909,407
Preferred and Guaranteed Stocks	46,619,388
Common Stocks	391,075
Mortgage Loans	370,267,984
Real Estate	127,709,871
Loans on Society's Policies	197,459,611
Other Assets	57,200,112
Total Admitted Assets	$2,740,635,508
RESERVES AND OTHER LIABILITIES	
Reserves for policy and contract liabilities	$2,546,850,838
Policyholders' prepaid premiums and unpaid dividends	29,085,890
Reserve for taxes	4,280,500
Unearned interest, expenses accrued and other liabilities	5,496,248
Reserve for future payments under agents' retirement plans and to retired employees	4,039,319
Funds allocated for dividends in 1942	34,401,465
Surplus funds for special contingencies	7,786,000
Unassigned funds (surplus)	108,695,248
Total Liabilities and Reserves	$2,740,635,508

*Including time deposits of $99,808.
†Including $5,356,316 on deposit with public authorities.

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1861 Civil War	1845—New York City 1851—San Francisco	1837
1898 Spanish-American War	1866—Portland, Me. 1871—Chicago	1843 1857
1917 World War I	1872—Boston 1877—St. John, N.B. 1889—Seattle; Spokane 1901—Jacksonville, Fla. 1904—Baltimore 1906—San Francisco	1873 1893 1907
1941 World War 2	1908—Chelsea 1914—Salem	1921 1929

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